

# State of Maine 457 Plan

## Investment Performance Review as of December 31, 2012



Presented by  
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## Executive Summary

- After hitting a high of 3.1% in the third quarter, the first estimate for fourth quarter GDP growth decelerated to -0.1%, well below the estimate of 1.0%. For 2012, the U.S. grew at a preliminary 2.2% rate, versus 1.8% in 2011.
- Employment gains averaged 153,000 per month in 2012, a level deemed by economists roughly sufficient to offset population growth but not yet indicative of a labor market recovery. The unemployment rate ended the year at 7.8%.
- CPI rose 1.7% over the past 12 months, which now marks three consecutive quarters of sub 2% CPI (year-over-year). Core CPI (excluding food and energy) for the last 12 months was 1.8%.
- Despite a pullback in the fourth quarter and what seemed like constant negative economic and political news from around the world, the equity markets turned in a strong year in 2012. For the quarter, the S&P 500 fell -0.4%, but gained 16% for the year. Performance was similar by market capitalization, as large and small cap indices returned 16.4% in 2012, but value beat growth by 2-3% for the year. The financials sector was the strongest performer for the quarter and year, returning 5.9% and 28.8%, respectively. Consumer discretionary stocks returned 2.1% for the quarter and 23.9% for the year. The weakest sectors in the quarter were technology and telecom, which fell -5.7% and -6.0%, respectively. For the year, only energy (+5.6%) and utilities (+1.3%) rose less than 10%.
- Foreign stock markets followed US markets for most of the year but finished on a stronger note on increased optimism over fiscal reform in Europe. The MSCI-EAFE returned 6.6% for the quarter and 17.9% for the year. Like the US, financial stocks ended the year well, returning 11% for the quarter and 34% for the year. Consumer discretionary stocks returned 25% for the year. Energy (+2%), utilities (+4%) and telecom (+4%) were the weakest sectors in 2012. Japanese markets returned 8% in 2012, as the strong US dollar lowered returns for US investors, while Europe rose 20% and the Pacific Rim increased 25%. The MSCI EM Index rose 5.6% for the quarter and 18.6% for 2012.
- The Barclays Capital US Aggregate Index returned 0.2% for the fourth quarter, bringing the one-year return to 4.2%. While the 10-year Treasury yield traded in a wide range over the year (100 basis points), it closed the year only 12 basis points lower at 1.76%. For the quarter, US Treasuries returned -0.1%, while credit led returns, particularly high yield and longer financials. The “risk-on” trade was in full force during the year with corporate bonds returning 9.8%, while other spread sectors, like CMBS (+9.7%), also outperformed. MBS and ABS posted small gains of 2.6% and 3.3%, respectively. High Yield bonds returned 15.8%, while non-USD bonds returned 1.5% for the year.

## Glossary of Terms

- **Asset Class:** A group of investments considered similar in potential risk and return. There are three basic asset classes: stocks, bonds and short-term securities (or cash).
- **Benchmark Index:** A standard against which the performance of a security, mutual fund or investment manager can be measured.
- **Excess Return:** The investment returns from a fund that exceed the return of its benchmark index. The excess return is used to judge how well a fund performed against its benchmark.
- **Expense Ratio:** The percentage of fund assets paid for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.
- **Fees:** Even small differences in fees can make a differences in returns over time. Here are some fees that funds charge:
  - **Load:** Fee paid when you buy shares of a mutual fund (called “front-load funds”) or when you sell shares of a mutual fund (back-end mutual funds). Also known as a “sales charge.”
  - **Load Fund:** Mutual fund that has a front- or back-end sales charge.
  - **Management Fee:** Amount paid by a mutual fund company from its assets to an investment advisor/administrator.
  - **No-Load Fund:** A mutual fund in which shares are sold with a commission or sales charge of no more than 0.25% per year.
  - **12b-1:** An annual marketing or distribution fee on a mutual fund. The 12b-1 fee is considered an operational expense and, as such, is included in a fund's expense ratio.
- **Holdings-Based Style Consistency Report:** This report allows a user to see the historical movement of a portfolio in terms of equity style, fixed-income style, sector, and asset allocation. This helps clearly describe the management of a fund over time and defines the consistency of that management.
- **Peer Universe:** Shows the range of investment results of a representative sampling of similar mutual funds. A fund that ranks at the median or better has performed well.
- **Revenue Sharing:** Sharing of management fees received by record keepers from nonproprietary mutual funds. Revenue-sharing arrangements are a common practice between defined contribution plan providers and nonproprietary mutual funds that they include in their fund lineups.
- **Standard deviation** – The standard deviation measures how wide the range in performance is between actual returns of a fund and the average return over a specific period. The larger the deviation, the greater the chance that any actual return will be more or less than the average. For example, an investment with a standard deviation of 14 is riskier than an investment with a standard deviation of 11.

## Introduction

- Buck Consultants has reviewed the State of Maine 457 Plan with respect to the performance of the options. The analysis was completed as of December 31, 2012.
- Buck reviews the performance of the plan on a quarterly basis. Recognizing that no single time period is sufficient, we use multiple time periods to measure each investment fund's performance. Three-year and five-year annualized, time-weighted total rates of return, net of fees, will be the primary measurement calculations. This review includes a comparison of the returns and the appropriate universes established in the Investment Policy.
- The report provides a series of exhibits that present current and historical fund rates of return, assets invested, fees, investment style and risk/return analyses.
- The Appendix includes our Market Commentary and a list of as definitions for several risk characteristics and graphs used as part of the analysis.
- Following is an executive summary and the policy checklist.



## **Executive Summary**

### **Mass Mutual Plan Level Comments**

- Buck reviewed the Plan for the period ended December 31, 2012.
- The current line-up has a fixed interest account plus a combination of 14 actively managed bond, balanced and stock mutual funds and six index funds. The Plan offers a broad spectrum of risk and return options where participants can have a material effect on their investment profile, depending on how they invest.
- The line up performed well in the fourth quarter, which helped several funds to outperform their respective benchmarks for the calendar year. While there is some near term underperformance with some of the funds, we do not recommend any changes to the investment line up at this time.
- American Funds Growth Fund of America remains on the watch list; performance improved in 2012.

### **Fund Level Comments**

- Short term: Results were good for 2012.
  - The fixed income funds continued to perform well. Hartford Total Bond and PIMCO Real Return outperformed.
  - Janus Balanced was solid, beating its benchmark by over 1.7%. Oakmark rebound in the fourth quarter, but lagged over the full year.
  - The domestic equity index funds performed as expected versus their benchmarks. The international index beat its benchmark by more than expected due to fair value pricing issues, which have largely corrected in 2013.
  - In domestic equities, several weak performers like Hartford Capital Appreciation, Growth Fund of America and Royce Value Plus performed well versus their index and peers. Weaker funds in 2012 were Hartford Dividend & Growth, Neuberger Berman Socially Responsible and Artisan Mid Cap Value.
  - In the international/global category MFS Int'l New Discovery had a strong year but Mutual Global Discovery lagged.
- Long term: Most funds are performing well and the funds that were lagging showed improvement.
  - Growth Fund of America trails the index but ranks at the median for three and above median for five years.
  - Hartford Capital Appreciation also improved in 2012 after a very weak 2011 and is off to a good start in 2013. The fund's risk characteristics are higher than the average large cap fund, but also has one of the strongest 10 year records.
  - We have added additional comments on funds that have experienced weak performance recently.

## Executive Summary

- **Fund Performance Mass Mutual** (continued)

- Equities

- Hartford Dividend Growth lagged in 2012 due to weak stock selection in the financial sector. The manager held only a small allocation to the large money center banks, like Bank of America, that performed well and favored the generally stable custody banks and insurance companies. The fund has trailed in two of the last three years and longer-term results have declined versus the index but still rank above the median manager. Despite the recent underperformance, the team is still in place and we believe this remains a reasonable choice.
- Neuberger Berman Socially Responsible has struggled lately. The fund has a long-tenured manager that has outperformed the median manager in eight of the last 10 years. The manager's stock selection in energy has been a big detractor in this concentrated fund. Overall, we still think this is a reasonable choice in the category. The fund is off to a very strong start in 2013 leading the index 10.9% vs. 6.6% through February.
- Artisan Mid Cap Value adds most of its value in down markets due to its attention to valuation and quality. Its very high active share (a measure of how different it is from the index) and concentrated positions lead to a portfolio that looks very different from the benchmark. These factors result in short-term returns that often differ by a wide margin relative to the index. Over time, this has benefited Artisan but at the moment the fund's positioning has hurt. Artisan also tends to add most of its value in down markets and the past four years, representing the recovery from a very poor market in 2008, have been strongly positive. During this period, the fund still has returned an annualized 17.3% to 18.3% for the index, not out of line with expectations, and has ranked in the 37<sup>th</sup> percentile. As we extend the time frame to five years, Artisan has consistently added value over rolling periods and has generated its returns with lower risk than the benchmark resulting in good risk-adjusted returns. For the year, an overweight allocation and security selection within the information technology sector was the single largest detractor, accounting for more than half of the underperformance.

## **Executive Summary**

### **ING Plan Level Comments**

- Buck reviewed the Plan for the period ended December 31, 2012.
- The current line-up has a fixed interest account plus a combination of 13 actively managed bond, balanced and stock mutual funds and six index funds. The Plan offers a broad spectrum of risk and return options where participants can have a material effect on their investment profile, depending on how they invest.
- The line up performed well in in 2012 with most fund outperforming their respective benchmarks.
- While there is some near term underperformance with some of the funds, we do not recommend any changes to the investment line up at this time.

### **Fund Level Comments**

- Short term: Results were good for 2012.
  - PIMCO Total Return and Templeton Global Bond had strong performances over the past twelve months and longer term. American Century Inflation Adjusted Bond fund has performed very well versus peer universe although it slightly lags the index.
  - ING Van Kampen Equity Income performed well in 2012, beating its benchmark by over 1.2%. Results improved versus the peer group and now rank above the median in each period.
  - The domestic equity index funds performed as expected versus their benchmarks. The international index beat its benchmark by more than expected due to fair value pricing issues, which have largely corrected in 2013.
  - In domestic equities, the top performers in 2012 like TRP Value, TRP Growth and ING Baron Small Cap Growth performed well versus their index and peers. Weaker funds in 2012 were Neuberger Berman Socially Responsible, TRP Mid Cap Growth and Allianz Small Cap Value.
  - In the international/global category, Dodge & Cox International and Oppenheimer Global had strong years.
- Long term:
  - Most funds are performing well and all of the funds rank in the top half of the peer group over the three and five year periods.
  - We have added additional comments on funds that have experienced weak performance recently.

## Executive Summary

- **Fund Performance** (continued)
  - Equities
    - Neuberger Berman Socially Responsible has struggled lately. The fund has a long-tenured manager that has outperformed the median manager in eight of the last 10 years. The manager's stock selection in energy has been a big detractor in this concentrated fund. Overall, we still think this is a reasonable choice in the category. The fund is off to a very strong start in 2013 leading the index 10.9% vs. 6.6% through February.
    - Allianz NFJ Small Cap Value returned 10.5% vs. 18.1% for the R2000 Value Index. The fund's strict valuation methodology, which has generally led to higher quality stocks, has lagged over the last year. Management held a large underweight in financials with just 14% vs. 37% for the index. The management team is not comfortable having such a large weighting in a single sector and missed the rally in REITs that took place in 2012. Despite the underperformance, the fund's long term results remain strong.
  - In October, Vanguard announced that the benchmarks for their U.S. equity index funds managed to MSCI will change to a new set of indices developed by the University of Chicago's Center for Research in Security Prices (CRSP).
    - For this Plan, the Total Stock Market and Mid Cap index funds are impacted.
    - Vanguard announced that the transitioning of funds would occur during the first half of 2013. As of January 31, 2013 all of the core style index funds have been transitioned (US Total Market on 1/15, Mega, Large, Mid, and Small Cap on 1/31). Transitioning of value- and growth-style index funds remains pending.
    - The purpose of the change is to save money on index licensing fees. Vanguard has avoided providing specific numbers but our contacts at Vanguard place the savings at approximately 1 basis point per year. CRSP is new to the business of investable index benchmarks, but the organization is well recognized as a provider of equity index data to the academic community.
    - Overall, we are not recommending any change and we will begin reporting the new benchmarks next quarter.



## **Executive Summary**

### **VALIC Plan Level Comments**

- Buck reviewed the Plan for the period ended December 31, 2012.
- The current line-up has a fixed interest account plus a combination of 14 actively managed bond, balanced and stock mutual funds and five index funds. The Plan offers a broad spectrum of risk and return options where participants can have a material effect on their investment profile, depending on how they invest.
- The line up offer mixed results in 2012 with the fixed income and international funds outperforming while the domestic funds were generally weak.
- While there is some near term underperformance with some of the funds, we do not recommend any changes to the investment line up at this time.
- The Turner Mid Cap Growth was placed on the watch list in 3Q 2012 for weak performance.

### **Fund Level Comments**

- Short term: Results were good for 2012.
  - PIMCO Total Return, Templeton Global Bond and PIMCO Real Return had strong performances over the past twelve months and longer term periods.
  - American Balanced performed well in 2012, beating its benchmark by over 2.9%. Results improved versus the benchmark and placed in the top third of the peer group in each period.
  - The domestic equity index funds performed as expected versus their benchmarks.
  - The domestic equity funds were generally weak in 2012. Harbor Capital Appreciation was the only fund to beat its benchmark for the year. The funds with the weakest results were Pioneer, Perkins Mid Cap Value, Turner Mid Cap Growth and Neuberger Berman Genesis.
  - In the international/global category, American Funds Euro Pacific Growth and Oppenheimer Global has strong years.
- Long term:
  - Most of the large cap funds lag their respective indices but are ahead of the median peer group over most time periods.
  - The mid and small cap funds have been the weakest performers.
  - We have added additional comments on funds with which we have concerns.

## Executive Summary

- **Fund Performance VALIC (continued)**
  - Equities
    - American Funds Investment Co of America lagged in 2012 and has now lagged the index for three consecutive years, which has hurt long-term performance.
      - During this time, the fund's management team experienced some minor turnover. The most recent change in 2012 was the removal of William Robbins, a five year veteran with the fund, as he moved to another part of the firm in the fourth quarter and relinquished his manager responsibilities. One of the long time managers retired in 2011. The fund has experienced periods of underperformance in the past but stays true to its philosophy and has been successful over longer time periods. While it might be coincidental, we think it is prudent to place the fund on the watch list and monitor results.
      - Management's allocation to foreign stocks, especially in the foreign banks, hurt in 2010. Weak stock selection in technology in 2010 and 2011, mainly due to weak results from Hewlett Packard and Nokia, also detracted. In 2012, the fund's holdings in energy was the largest detractor.
    - Pioneer Fund has a long-tenured manager but has lagged due to a very weak results in 2011 and 2012. The fund was able to narrow the underperformance gap in 2012 with a stronger fourth quarter return of 0.1% vs. -0.4% for the S&P 500. Weak stock selection in financials and consumer discretionary stocks hurt performance. Within financials the manager did not own many of the best performing bank stocks due to valuation concerns. Investments in investment managers and insurers, while rising double-digits, failed to keep pace with the 29% average return for the stocks in the index. Given the manager's long history we would allow more time for an improvement. Results have improved slightly in 2013, as the fund leads the index and places in the top third of its peer for the first two months of the year.

## Executive Summary

- **Fund Performance VALIC (continued)**

- Equities

- Janus Perkins Mid Cap Value lagged the Russell Mid Cap Value 1.1% versus 3.9% and ranked in the 91<sup>st</sup> percentile of its mid value peers. For the full year, the fund lagged the index returning 10.0% versus 18.5%. For most of the year, the fund's large allocation to cash (avg. 10%) subtracted 2% from relative performance. An overweight in energy, mainly to underperforming natural gas producers, also detracted from results. Holdings in the consumer discretionary sector returned 15% for the year but the index's holdings returned 30%.
  - The fund outperformed in weak markets like 2007 and 2008 but has been struggling since the market bottom in 2009. We saw a similar pattern after the technology bubble in 2000 when the fund protected in the down market but did not keep pace with the market in strong rallies. It is also worth noting that the fund has generated its returns with much lower risk than the index and peer group.
- Turner Mid Cap Growth (VALIC) has struggled recently and has posted weak results over the last three and five year periods. During 2012 the major detractors from performance were the health-care, technology, energy, and consumer-discretionary sectors.
  - We recommend placing the fund on the watch list at the end of the 3Q 2012. The fund's long time manager is one of the benefits of the strategy but its volatility is one of the least attractive. The fund has above average risk characteristics and given its weakness we doubt that participants are being rewarded for the additional risk. Performance has improved in 2013 as the fund leads the index and places in the top third of its peer for the first two months of the year. We will continue to monitor performance.
- Genesis finished the year well, returning 2.3% in the fourth quarter to 1.9% for the Russell 2000 Index, but the fund never recovered from weak relative returns in the first quarter (Genesis rose 6.8% in the first quarter versus 12.4% for the benchmark). For the year, Genesis returned 10.1% to 16.4% and placed in the 90<sup>th</sup> percentile of the peer group. The 2012 result reversed much, but not all, of the good relative results in 2011, when Genesis rose 4.9% to -4.2% for the index. When you combine these two years, the fund is up 7.5% (annualized) to 5.6% for the index and ranks in the 22<sup>nd</sup> percentile of the universe. Over rolling five year periods, Genesis has consistently added value and has generated its returns with much lower volatility than the benchmark, resulting in good risk-adjusted returns.

## Executive Summary- Policy Objectives

- We have included a summary Policy Objectives table for the Committee to consider as a top-level look at the Plan's funds. The summary includes the following categories: primary and secondary (if applicable) index comparison, primary and secondary (if applicable) peer universe ranking, stability of the portfolio management team (we use a three year tenure as a key criteria), consistency of the investment style and the strength of the overall organization. The latter three criteria are based on our qualitative assessments.
- Each category is scored as follows:
  - Qualitative factors - a fund receives a rank of "+, =, or -". These rankings represent Buck's assessment of the consistency of the management team, investment process and organizational stability of each firm.  
Quantitative factors: These represent results as of the most recent quarter end. For the index comparisons, a fund receives a "+, = or -" based on its performance versus its benchmark. For passive funds, we consider performance equal to the benchmark if return is below the index by less than the expense ratio. For peer comparisons, a fund receives a "+" if it ranked in the top third, an "=" if it ranked in the top half and a "-" if it ranked in the bottom half of the universe.
- The information presented is intended to provide a "snap shot" of each fund at a given point in time. While we believe that this information is useful and informative as a monitoring tool, we do not see it as a scoring system that "locks in" a decision. We recommend using the table as a starting point to identify funds that may require deeper analysis to determine whether there is a problem that may warrant some type of action.
- The criteria listed are by no means the only factors that are considered when assessing a fund. For example, a much longer track record, say ten years, may be warranted for a fund with a long-term manager. Risk-adjusted returns, fees and performance consistency are also considered. As we have discussed in the past, we believe that performance monitoring requires a combination of art and science and this summary is just one step in the process.
- For information on the specific benchmark and universe objectives, see the Appendix beginning on page 36.
- We dropped the active manager universe comparisons for index funds because:
  - Index funds were added to provide low cost exposure to key asset classes.
  - Relative ranking to a universe of actively managed funds is not a criteria we use to determine their plan status.
  - Index universes could be constructed but return range is narrow and some categories have few options.

# Performance Objectives – Mass Mutual

Fund	Relative to Primary Index (1, 3, 5 Years)	Relative to Peer Universe (1, 3, 5 Years)	Management Consistency	Investment Style Consistency	Organizational Stability	Watch list (W) Terminate (T)
Hartford Total Return Bond HLS	+, +, -	=, =, -	= (3/12)	+	+	W
SSgA Intermediate Bond Index	-, =, =	n/a	+	+	+	
PIMCO Real Return A	+, +, +	+, +, +	+	+	+	
Janus Balanced	+, -, +	+, -, +	+	+	+	
Oakmark Equity Inc I	-, -, +	-, -, +	+	+	+	
Hartford Div & Growth HLS	-, -, +	-, =, +	+	+	+	
Hartford Capital App HLS	+, -, -	+, -, -	+	+	+	
Neuberger Berman Soc Responsibility Tr	-, -, -	-, =, =	+	+	+	
SSgA S&P 500 Index	=, =, =	n/a	+	+	+	
SSgA US Total Market Index	+, +, =	n/a	+	+	+	
Amer Funds Growth of America R3	+, -, -	+, -, -	+	+	+	
Artisan Mid Cap Value	-, -, +	-, -, +	+	+	+	
SSgA S&P 400 Mid Cap Index	-, =, =	n/a	+	+	+	
Hartford Mid Cap HLS	+, -, -	+, -, =	- (5/11)	+	+	
Nuveen NWQ Small Cap Value A	+, +, -	+, +, -	+	+	+	
SSgA Russell 2000 Index	+, +, +	n/a	+	+	+	
Royce Value Plus Svc	+, -, -	+, -, -	+	+	+	
MFS Int'l New Discovery A	+, +, +	+, +, +	+	+	+	
SSgA MSCI-EAFE	+, =, =	n/a	+	+	+	
Mutual Global Discovery A	-, -, +	-, =, +	+	+	+	

**Key to table:**

**Relative to Benchmark:**

+ Outperformance  
= Equal Performance  
- Underperformance

**Relative to Peer Group:**

+ Top Third Ranking  
= Top Half Ranking  
- Bottom Half Ranking

For index funds, we consider performance equal to benchmark if return difference is less than expense ratio



# Performance Objectives - ING

Fund	Relative to Primary Index (1, 3, 5 Years)	Relative to Peer Universe (1, 3, 5 Years)	Management Consistency	Investment Style Consistency	Organizational Stability	Watch list (W) Terminate (T)
PIMCO Total Return Admin	+, +, +	+, =, +	+	+	+	
Vanguard Tot Bond Mkt Idx - Sig	=, =, =	n/a	+	+	+	
Amer Century Infl-Adj Bond - Inv	-, -, -	+, =, +	+	+	+	
Templeton Global Bond - Advisor	+, +, +	+, +, +	+	+	+	
ING Van Kampen Eq Inc I	+, -, -	=, =, +	+	+	=	
T. Rowe Price Value Adv	+, -, +	+, +, +	+	+	+	
Fidelity Contrafund	-, -, +	=, +, +	+	+	+	
Neuberger Ber Socially Resp- Inv	-, -, -	-, =, =	+	+	+	
ING Stock Index	=, -, =	n/a	+	+	+	
Vanguard Tot Stk Mkt Idx Sig	=, =, +	n/a	+	+	+	
ING TRP Growth Equity I	+, -, -	+, +, +	+	+	+	
Vanguard Mid Cap Index Sig	=, =, =	n/a	+	+	+	
TRP Mid Cap Growth Adv	-, -, +	-, +, +	+	+	+	
Allianz Small Cap Value - I	-, +, +	-, =, +	+	+	+	
ING Russell Sm Cap Index I	=, =, n/a	n/a	+	+	+	
ING Baron Small Cap Gr I	+, +, +	+, +, +	+	+	+	
Dodge & Cox International Stock	+, +, +	+, +, +	+	+	+	
ING International Index Port - I	+, +, n/a	n/a	+	+	+	
ING Oppenheimer Global Sec I	+, +, +	+, +, +	+	+	+	

Key to table:

**Relative to Benchmark:**

+ Outperformance  
= Equal Performance  
- Underperformance

**Relative to Peer Group:**

+ Top Third Ranking  
= Top Half Ranking  
- Bottom Half Ranking

For index funds, we consider performance equal to benchmark if return difference is less than expense ratio

# Performance Objectives - VALIC

Fund	Relative to Primary Index (1, 3, 5 Years)	Relative to Peer Universe (1, 3, 5 Years)	Management Consistency	Investment Style Consistency	Organizational Stability	Watch list (W) Terminate (T)
Dreyfus Bond Market Index Inv	-, -, -	n/a	+	+	+	
PIMCO Total Return A	+, +, +	+, =, +	+	+	+	
PIMCO Real Return A	+, +, +	+, +, +	+	+	+	
Templeton Global Bond A	+, +, +	+, +, +	+	+	+	
Amer Funds Amer Bal A	+, +, -	+, +, +	+	+	+	
Amer Funds Inv Co. of Amer A	-, -, +	=, -, =	+	+	+	
MFS Value A	-, -, +	+, -, =	+	+	+	
Calvert Social Inv. Equity	-, -, +	=, -, +	+	+	+	
Dreyfus S&P 500 Index	-, -, =	n/a	+	+	+	
Pioneer A	-, -, -	-, -, -	+	+	+	
Harbor Capital App Adm	+, -, -	=, -, +	+	+	+	
Perkins Mid Cap Value A	-, -, -	-, -, =	+	+	+	
Dreyfus Mid Cap Index	-, -, =	n/a	+	+	+	
Turner Mid Cap Growth	-, -, -	-, -, -	+	+	+	W
Dreyfus Small Cap Stock Index	=, =, =	n/a	+	+	+	
Neuberger Berman Genesis Adv	-, -, -	-, -, =	+	+	+	
Amer Funds Euro Pacific R3	+, -, +	=, -, +	+	+	+	
Dreyfus International Stock Index	=, -, =	n/a	+	+	+	
Oppenheimer Global A	+, +, +	+, +, +	+	+	+	

Key to table:

**Relative to Benchmark:**

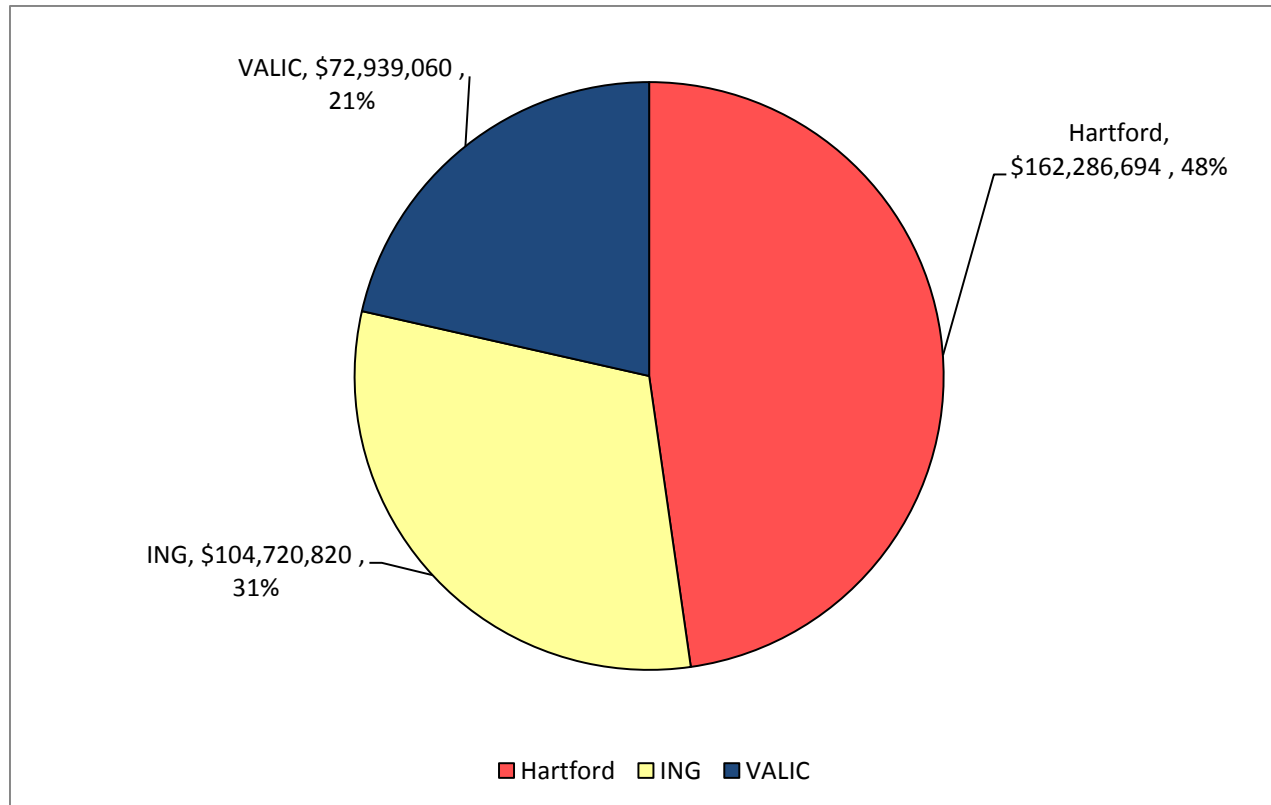
+ Outperformance  
= Equal Performance  
- Underperformance

**Relative to Peer Group:**

+ Top Third Ranking  
= Top Half Ranking  
- Bottom Half Ranking

For index funds, we consider performance equal to benchmark if return difference is less than expense ratio

## Asset Allocation as of December 31, 2012



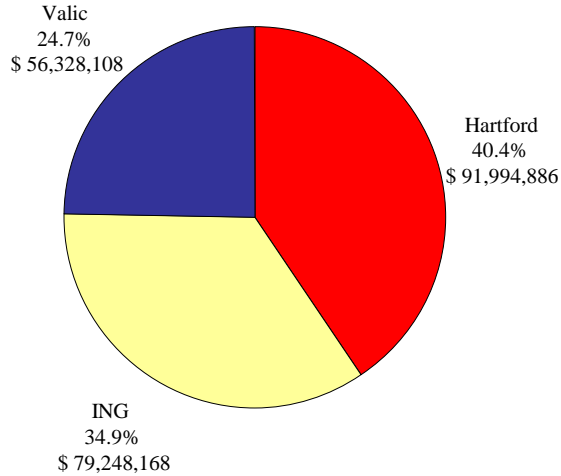
**Total Assets = \$ 339,946,575**

Note: Total Assets include investments in funds no longer available to new investors.

Historical Allocations

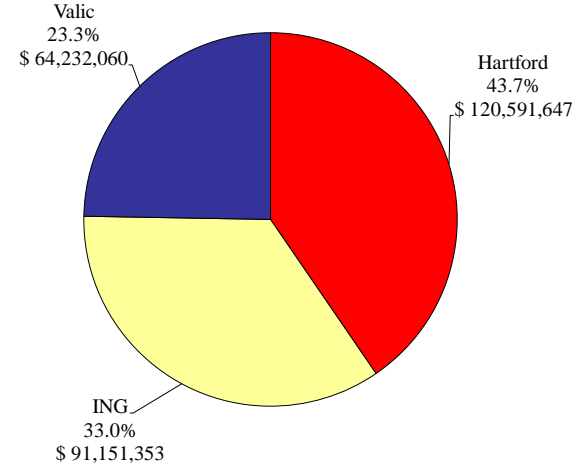
12/31/2008

**Total Assets = \$ 227,481,163**



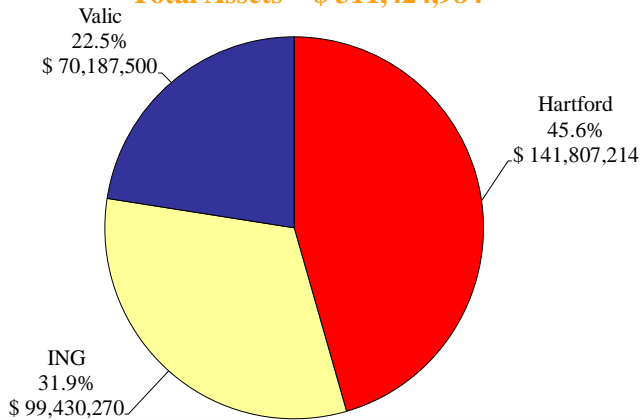
12/31/2009

**Total Assets = \$ 275,975,060**



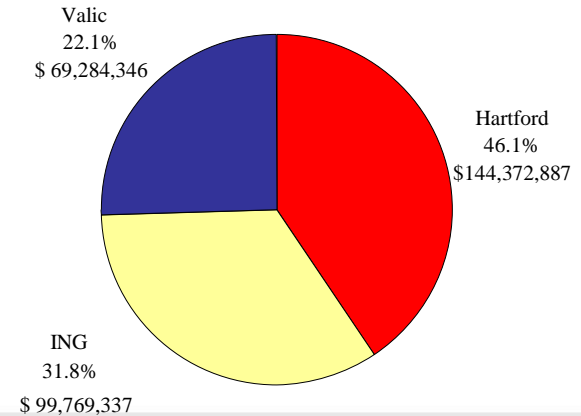
12/31/2010

**Total Assets = \$ 311,424,984**



12/31/2011

**Total Assets = \$ 313,426,569**



# Vendor Performance Comparison – Net of Fees as of December 31, 2012

The returns are calculated net of all fees. The Percentage rank is the funds ranking within its mutual fund style universe.

Mass Mutual Fixed Account	Current guaranteed interest rate is 4.0%. The minimum guaranteed rate is 4.0%									
ING Fixed Account	Current guaranteed interest rate is 3.00%. The minimum guaranteed rate is 3.00%									
VALIC Fixed Account	Current guaranteed interest rate is 3.00%. The minimum guaranteed rate is 3.00%									
	Qtr Return	% Rank	1 Year Return	% Rank	2 Year Return	% Rank	3 Year Return	% Rank	5 Year Return	% Rank
<b>Intermediate-Term Fixed Income- Active</b>										
MM- Hartford Total Return Bond HLS	0.94	31	7.54	39	7.26	25	7.35	34	5.62	66
ING- PIMCO Total Return Admin	1.04	26	9.81	15	6.70	40	7.23	36	7.82	11
VALIC- PIMCO Total Return Bond A	1.07	26	9.93	14	6.79	40	7.31	35	7.88	11
<i>Barclays Capital Aggregate Bond Index</i>	<i>0.21</i>		<i>4.21</i>		<i>6.01</i>		<i>6.19</i>		<i>5.95</i>	
<b>Intermediate-Term Fixed Income- Passive</b>										
ING -Vanguard Total Bond Market Index	0.13	--	4.15	--	5.90	--	6.11	--	5.91	--
VALIC- Dreyfus Bond Index Inv	0.03	--	3.69	--	5.54	--	5.69	--	5.42	--
<i>Barclays Capital Aggregate Bond Index</i>	<i>0.21</i>		<i>4.21</i>		<i>6.01</i>		<i>6.19</i>		<i>5.95</i>	
MM -SSgA Interm Bond Index	0.28	--	3.69	--	4.64	--	5.02	--	5.09	--
<i>Barclays Cap Interm Gov/Credit Index</i>	<i>0.35</i>		<i>3.89</i>		<i>4.84</i>		<i>5.19</i>		<i>5.18</i>	
<b>Inflation Protect Fixed Income - Active</b>										
MM- PIMCO Real Return A	0.90	11	8.82	9	9.96	15	9.07	10	7.44	7
ING- American Century Inflation Adj Bd Inv	0.54	63	6.68	33	9.80	24	8.34	42	6.84	24
VALIC- PIMCO Real Return A	0.90	11	8.82	9	9.96	15	9.07	10	7.44	7
<i>Barclays Capital US TIPS Index</i>	<i>0.69</i>		<i>6.98</i>		<i>10.22</i>		<i>8.90</i>		<i>7.04</i>	
<b>Global Fixed Income</b>										
ING- Templeton Global Bond Adv	3.76	2	15.86	4	6.34	24	8.40	19	9.98	1
VALIC - Templeton Global Bond A	3.75	2	15.81	4	6.33	24	8.41	19	9.98	1
<i>Citigroup Non-US WGBI</i>	<i>-2.36</i>		<i>1.51</i>		<i>3.32</i>		<i>3.95</i>		<i>5.24</i>	
<b>Balanced</b>										
MM -Janus Balanced	0.86	67	12.97	29	6.98	20	7.24	64	5.38	2
MM -Oakmark Equity Income I	1.41	43	9.05	88	4.76	70	6.32	84	3.84	12
ING Van Kampen Equity Inc I	0.49	75	12.51	34	5.63	50	7.54	49	3.07	25
VALIC - Amer Funds Amer Balanced A	1.31	48	14.19	13	8.88	4	10.25	6	3.80	13
<i>60%/40% S&amp;P 500/ BC Agg Bond</i>	<i>-0.14</i>		<i>11.31</i>		<i>7.95</i>		<i>9.32</i>		<i>3.81</i>	



# Vendor Performance Comparison – Net of Fees as of December 31, 2012

The returns are calculated net of all fees. The Percentage rank is the funds ranking within its mutual fund style universe.

	Qtr Return	% Rank Rank	1 Year Return	% Rank Rank	2 Year Return	% Rank Rank	3 Year Return	% Rank Rank	5 Year Return	% Rank Rank
<b><i>US Equity - Large Value</i></b>										
MM- Hartford Dividend & Growth HLS	0.47	64	13.59	66	7.28	47	9.22	48	1.88	20
ING -T. Rowe Price Value – Adv	2.68	13	19.19	7	7.99	34	10.52	20	2.15	17
VALIC - Amer Funds Inv Co. of Amer A	0.85	52	15.60	40	6.57	57	7.98	72	0.88	40
VALIC - MFS Value A	0.68	58	16.13	33	7.65	40	8.89	54	0.88	40
<i>Russell 1000 Value Index</i>	<i>1.52</i>		<i>17.51</i>		<i>8.61</i>		<i>10.86</i>		<i>0.59</i>	
<b><i>US Equity – Large Blend Active</i></b>										
MM- Hartford Capital App HLS	4.37	3	18.34	11	2.39	93	6.89	84	-0.65	80
MM -Neuberger Ber Socially Res Inv	1.77	20	10.95	87	3.79	85	9.77	38	1.13	42
ING - Fidelity Contrafund	-1.65	92	15.95	35	7.51	42	10.45	22	1.71	25
ING -Neuberger Ber Socially Res Inv	1.77	20	10.67	88	3.54	87	9.50	42	0.88	49
VALIC -Calvert Social Inv. Equity	0.06	56	15.52	45	6.27	61	9.81	37	2.63	11
VALIC -Pioneer A	0.06	55	9.91	93	2.41	93	6.66	86	-0.22	72
<i>S&amp;P 500 Index</i>	<i>-0.38</i>		<i>16.00</i>		<i>8.84</i>		<i>10.87</i>		<i>1.66</i>	
<b><i>US Equity – Large Blend Passive</i></b>										
MM - SSgA S&P 500 Index	-0.42	--	15.82	--	8.65	--	10.72	--	1.54	--
ING Stock Index	-0.38	--	15.79	--	8.62	--	10.59	--	1.43	--
VALIC -Dreyfus S&P 500 Index Inv	-0.51	--	15.45	--	8.33	--	10.37	--	1.23	--
<i>S&amp;P 500 Index</i>	<i>-0.38</i>		<i>16.00</i>		<i>8.84</i>		<i>10.87</i>		<i>1.66</i>	
MM- SSgA US Total Market Index	0.21	--	16.37	--	8.33	--	11.22	--	2.09	--
<i>Wilshire 5000 Index</i>	<i>0.10</i>		<i>16.06</i>		<i>8.25</i>		<i>11.15</i>		<i>2.03</i>	
ING - Vanguard Total Stock Market	0.19	--	16.39	--	8.47	--	11.31	--	2.29	--
<i>MSCI US Broad Market Index</i>	<i>0.20</i>		<i>16.44</i>		<i>8.49</i>		<i>11.34</i>		<i>2.27</i>	
<b><i>US Equity – Large Growth</i></b>										
MM- Amer Fds Gr Fund of Amer R3	2.20	7	20.20	8	6.78	45	8.48	65	0.79	58
ING T. Rowe Price Growth Equity	-1.07	54	18.62	16	8.20	21	10.92	21	2.33	27
VALIC -Harbor Capital App Adm	-1.34	63	15.27	49	7.48	33	8.70	61	2.61	23
<i>Russell 1000 Growth Index</i>	<i>-1.32</i>		<i>15.26</i>		<i>8.77</i>		<i>11.35</i>		<i>3.12</i>	

# Vendor Performance Comparison – Net of Fees as of December 31, 2012

The returns are calculated net of all fees. The Percentage rank is the funds ranking within its mutual fund style universe.

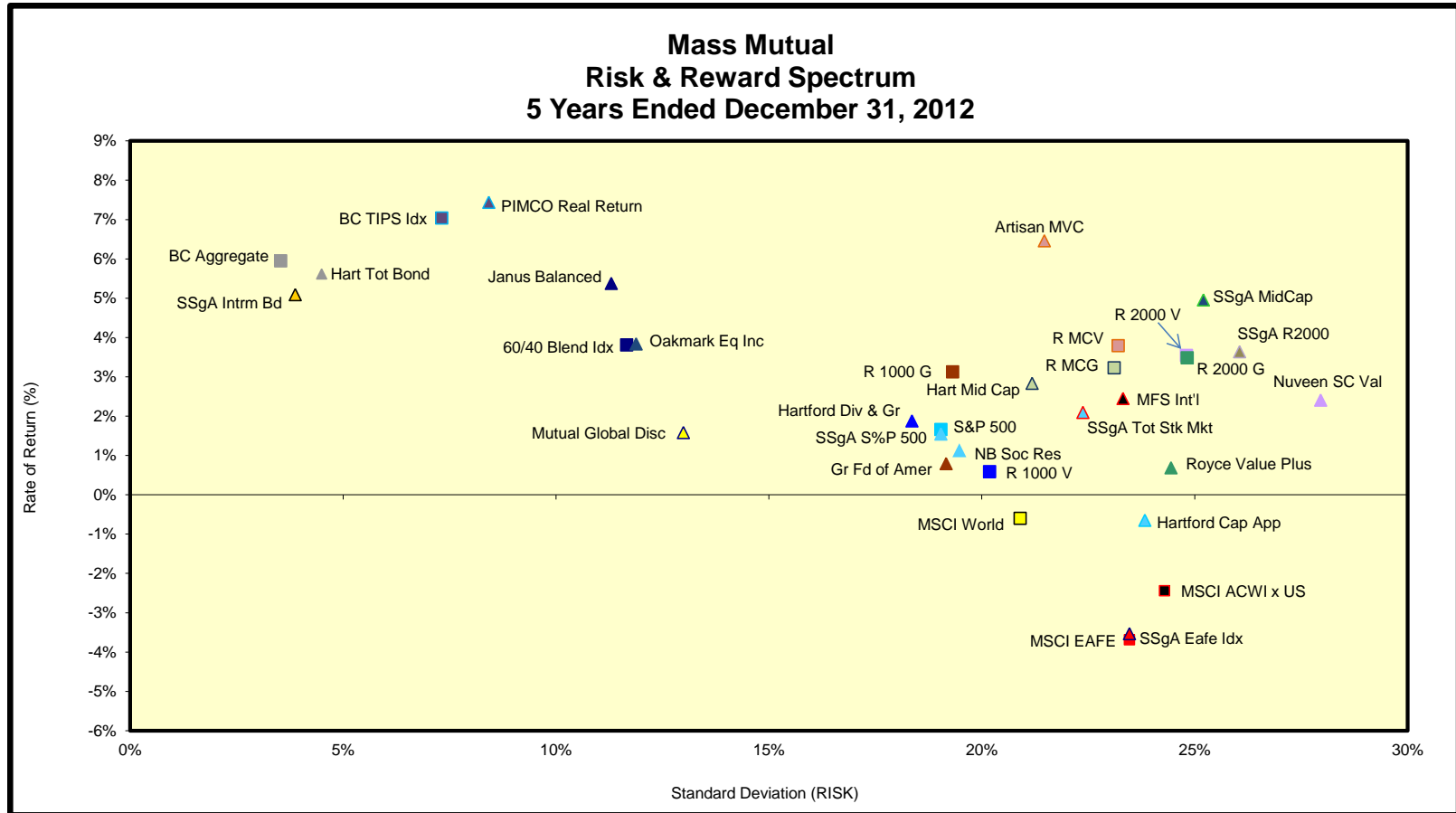
	Qtr Return	% Rank Rank	1 Year Return	% Rank Rank	2 Year Return	% Rank Rank	3 Year Return	% Rank Rank	5 Year Return	% Rank Rank
<b>US Equity – Mid Value</b>										
MM- Artisan Mid Cap Value	3.90	35	11.39	86	8.88	11	10.68	61	6.46	8
VALIC - Perkins Mid Cap Value	1.16	90	10.08	92	3.48	81	7.08	89	3.06	50
<i>Russell Mid Cap Value Index</i>	<i>3.93</i>		<i>18.51</i>		<i>8.11</i>		<i>13.39</i>		<i>3.79</i>	
<b>US Equity – Mid Blend Passive</b>										
MM- SSgA S&P Mid Cap Index	3.55	--	17.68	--	7.43	--	13.42	--	4.96	--
VALIC - Dreyfus Mid Cap Index Inv	3.49	--	17.20	--	7.06	--	13.04	--	4.70	--
<i>S&amp;P 400 Index</i>	<i>3.61</i>		<i>17.88</i>		<i>7.63</i>		<i>13.62</i>		<i>5.15</i>	
ING - Vanguard Mid Capitalization Index Signal	2.84	--	16.02	--	6.63	--	12.62	--	3.15	--
<i>MSCI US Mid Cap 450 Index</i>	<i>2.84</i>		<i>16.04</i>		<i>6.69</i>		<i>12.68</i>		<i>3.19</i>	
<b>US Equity – Mid Growth</b>										
MM- Hartford Mid Cap HLS	2.24	26	19.44	8	4.87	50	10.73	58	2.83	36
ING - TRP Mid Cap Growth Adv	1.50	46	13.33	59	5.53	42	12.40	33	4.29	21
VALIC - Turner Mid Cap Growth	-2.35	96	5.97	97	-1.45	97	7.26	90	-1.21	87
<i>Russell Mid Cap Growth Index</i>	<i>1.69</i>		<i>15.81</i>		<i>6.72</i>		<i>12.91</i>		<i>3.23</i>	
<b>US Equity – Small Value</b>										
MM- Nuveen NWQ Sm Cap Val A	3.97	40	18.26	30	8.70	7	16.66	2	2.41	86
ING - Allianz NFJ Small Cap Value – I	2.73	73	10.51	89	6.32	23	12.22	35	5.26	30
<i>Russell 2000 Value Index</i>	<i>3.22</i>		<i>18.05</i>		<i>5.62</i>		<i>11.57</i>		<i>3.55</i>	
<b>US Equity – Small Blend Active</b>										
VALIC -Neuberger Berman Genesis Trust	2.24	53	9.82	90	7.18	25	11.72	53	3.40	46
<i>Russell 2000 Index</i>	<i>1.85</i>		<i>16.35</i>		<i>5.59</i>		<i>12.25</i>		<i>3.56</i>	
<b>US Equity – Small Blend Passive</b>										
MM- SSgA Russell 2000 Index	1.84	--	16.40	--	5.64	--	12.26	--	3.64	--
ING Russell Small Cap Index I	1.74	--	16.04	--	5.59	--	12.12	--	n/a	--
<i>Russell 2000 Index</i>	<i>1.85</i>		<i>16.35</i>		<i>5.59</i>		<i>12.25</i>		<i>3.56</i>	
VALIC - Dreyfus Small Cap Stock Index	2.22	--	16.02	--	8.15	--	13.81	--	5.03	--
<i>S&amp;P 600 Index</i>	<i>2.22</i>		<i>16.33</i>		<i>8.40</i>		<i>14.07</i>		<i>5.14</i>	

## Vendor Performance Comparison – Net of Fees as of December 31, 2012

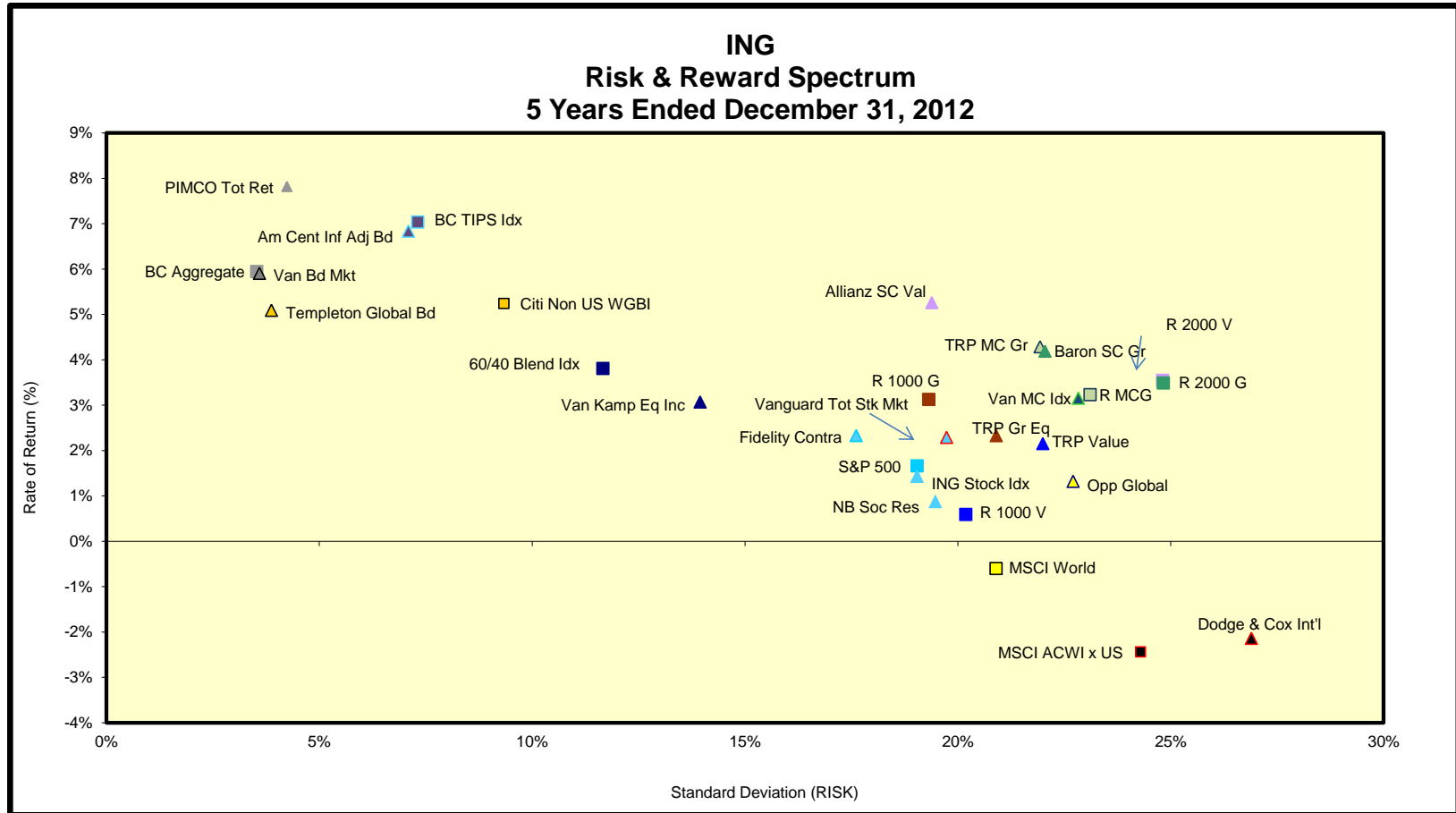
The returns are calculated net of all fees. The Percentage rank is the funds ranking within its mutual fund style universe.

	Qtr	%	1 Year	%	2 Year	%	3 Year	%	5 Year	%
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
<b><i>US Equity – Small Growth</i></b>										
MM- Royce Value Plus Service	0.88	36	15.25	29	1.86	83	7.49	90	0.69	77
ING Baron Small Cap Growth	3.32	10	19.66	5	10.57	2	15.65	8	4.19	27
<i>Russell 2000 Growth Index</i>	0.45		14.59		5.48		12.82		3.49	
<b><i>International Equity- Active</i></b>										
MM- MFS Int'l New Discovery A	4.36	93	24.71	5	5.92	4	10.98	1	2.45	3
ING Dodge & Cox Int'l	8.99	7	20.73	19	0.61	52	4.70	32	-2.14	24
VALIC - American Funds EuroPacific R3	5.50	76	18.89	35	1.20	43	3.76	54	-1.68	17
<i>MSCI ACWI ex US Index</i>	5.89		17.39		0.87		4.33		-2.44	
<b><i>International Equity- Passive</i></b>										
MM- SSgA EAFE Index	7.45	--	18.42	--	1.98	--	3.84	--	-3.53	--
ING International Index I	7.50	--	18.72	--	2.11	--	3.99	--	n/a	--
VALIC - Dreyfus Int'l Stock Index Inv	7.36	--	17.74	--	1.49	--	3.40	--	-3.94	--
<i>MSCI-EAFE Index (net)</i>	6.57		17.32		1.53		3.56		-3.69	
<b><i>Global Equity</i></b>										
MM- Mutual Global Discovery A	2.41	70	13.34	73	4.85	36	6.89	49	1.58	17
ING Oppenheimer Global Portfolio	7.42	4	21.39	14	5.49	28	8.80	23	1.32	21
VALIC - Oppenheimer Global A	7.29	5	20.75	17	5.00	34	8.45	26	0.92	26
<i>MSCI-World Index</i>	2.63		16.54		5.21		7.53		-0.60	

## 5 Year Risk/Return Chart

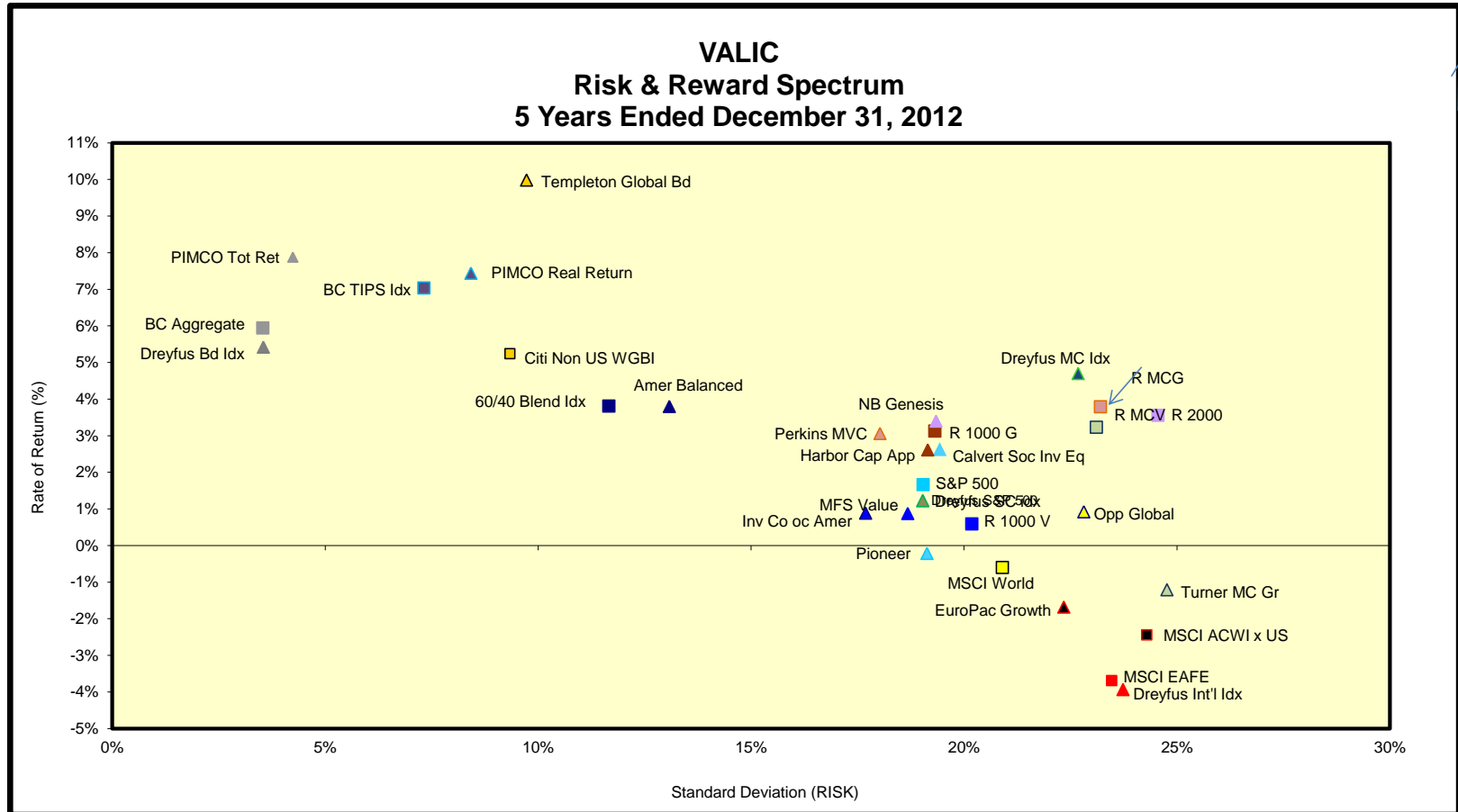


## 5 Year Risk/Return Chart



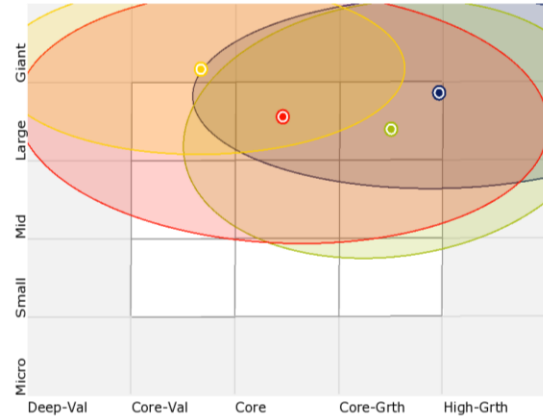


# 5 Year Risk/Return Chart



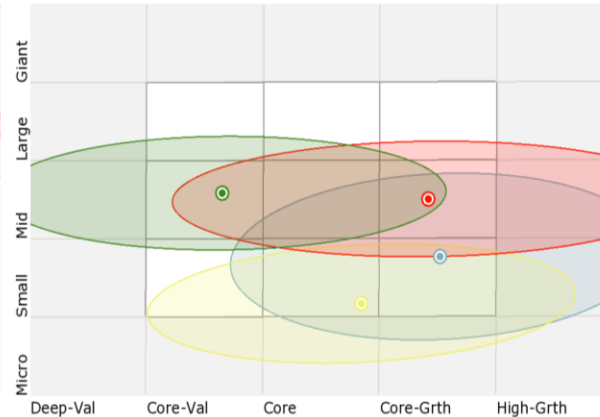
## U.S. Equity Style Box – Mass Mutual

Holdings-Based Style



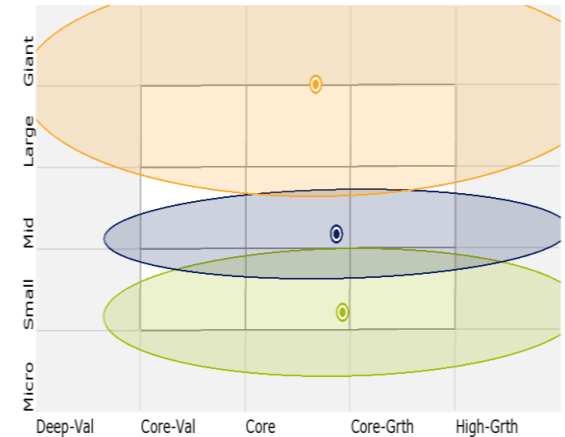
● Hartford Dividend & Growth HLS IA 
 ● Hartford Capital Appreciation HLS IA 
 ● Neuberger Berman Socially Resp Inv 
 ● American Funds Growth Fund of Amer R3

Holdings-Based Style



● Artisan Mid Cap Value Investor 
 ● Hartford MidCap HLS IA 
 ● Nuveen NWQ Small Cap Value A 
 ● Royce Value Plus Svc

Holdings-Based Style



● SSgA S&P 500 Index Instl 
 ● S&P MidCap 400 TR 
 ● Russell 2000 TR USD

Large Cap Funds

Mid & Small Cap Funds

Index Funds

Common Holdings

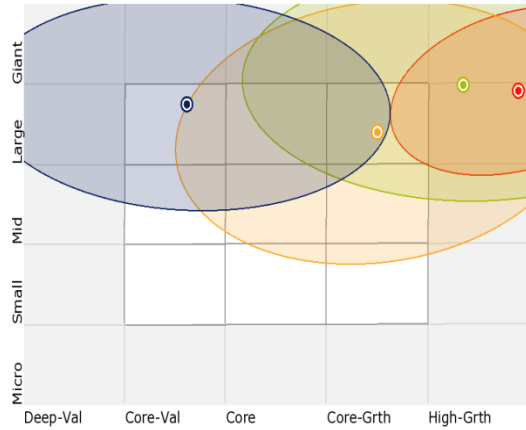
	1	2	3	4	5	6	7	8	9	10
1 Hartford Dividend & Growth HLS IA		0.28	0.08	0.18	0.01	0.01	0.00	0.00	0.00	0.22
2 Hartford Capital Appreciation HLS IA	0.28		0.03	0.23	0.04	0.07	0.00	0.01	0.01	0.16
3 Neuberger Berman Socially Resp Inv	0.08	0.03		0.06	0.06	0.03	0.00	0.01	0.00	0.01
4 American Funds Growth Fund of A...	0.18	0.23	0.06		0.02	0.03	0.00	0.00	0.01	0.12
5 Artisan Mid Cap Value Investor	0.01	0.04	0.06	0.02		0.07	0.01	0.03	0.00	0.02
6 Hartford MidCap HLS IA	0.01	0.07	0.03	0.03	0.07		0.00	0.03	0.00	0.02
7 Nuveen NWQ Small Cap Value A	0.00	0.00	0.00	0.00	0.01	0.00		0.00	0.00	0.00
8 Royce Value Plus Svc	0.00	0.01	0.01	0.00	0.03	0.03	0.00		0.00	0.00
9 MFS International New Discovery A	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00		0.00
10 Mutual Global Discovery A	0.22	0.16	0.01	0.12	0.02	0.02	0.00	0.00	0.00	

Note: Source is Morningstar. A portfolio's Ownership Zone is derived by plotting each stock in the fund's portfolio. A shaded area represents the center 75% of the fund's assets. A "centroid" plot in the middle of the Ownership Zone is the weighted average of all the fund's holdings. The top chart plots the centroid point over time to measure consistency.

The Common Holdings table measures the stock overlap between two funds or a fund and index. As an example, if two funds hold the same stock and one has a 5% position and the other 2%, the common holding between them is 2%. Adding up the overlap across the portfolio gives the common holdings percentage shown in the table. 1-Common Holdings is referred to as Active Share.

## U.S. Equity Style Box - ING

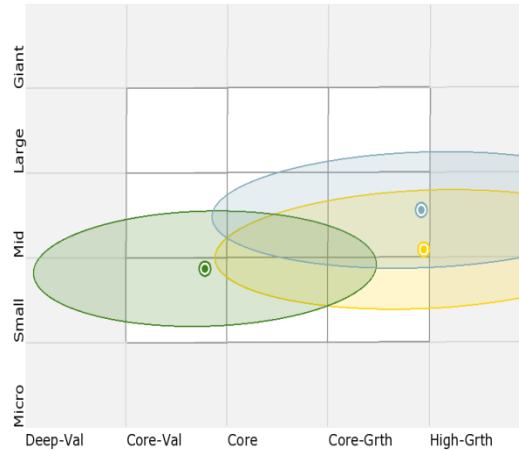
Holdings-Based Style



● T. Rowe Price Value Adv ● Fidelity Contrafund ● Neuberger Berman Socially Resp Inv  
● ING T. Rowe Price Growth Equity Port S

Large Cap Funds

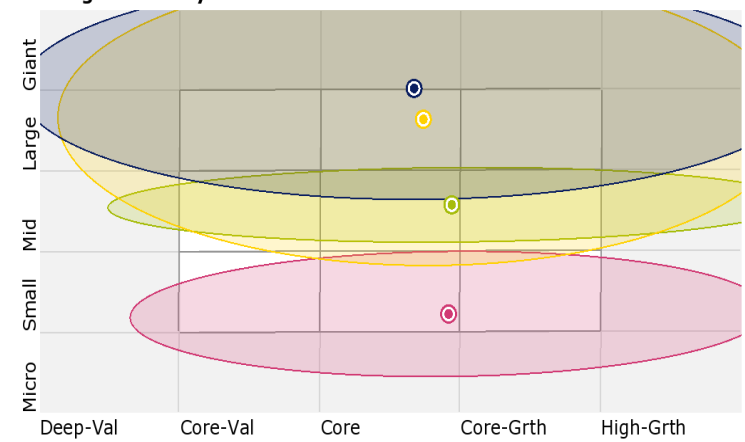
Holdings-Based Style



● T. Rowe Price Mid-Cap Growth Adv ● Allianz NFJ Small Cap Value Instl ● ING Baron Small Cap Growth Port I

Mid & Small Cap Funds

Holdings-Based Style



● ING US Stock Index Port I ● Vanguard Total Stock Mkt Idx Signal ● Vanguard Mid Cap Index Signal  
● ING Russell Small Cap Index Port I

Index Funds

### Common Holdings

	1	2	3	4	5	6	7	8	9
1	T. Rowe Price Value Adv								
2	Fidelity Contrafund								
3	Neuberger Berman Socially Resp Inv								
4	ING T. Rowe Price Growth Equity Po...								
5	T. Rowe Price Mid-Cap Growth Adv								
6	Allianz NFJ Small Cap Value Instl								
7	ING Baron Growth Portfolio I								
8	Dodge & Cox International Stock								
9	Oppenheimer Global A								

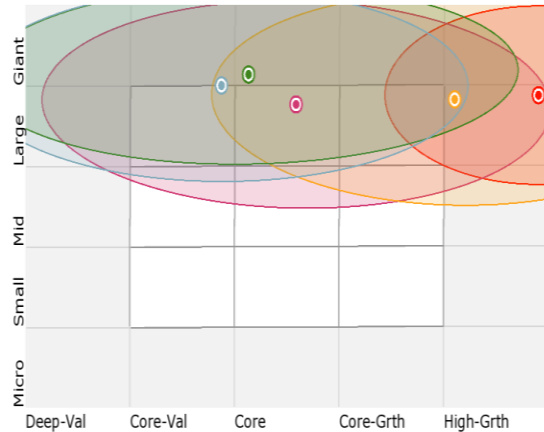
	1	2	3	4	5	6	7	8	9
1		0.09	0.09	0.06	0.04	0.00	0.00	0.01	0.07
2	0.09		0.10	0.38	0.07	0.00	0.02	0.01	0.11
3	0.09	0.10		0.13	0.03	0.01	0.00	0.03	0.06
4	0.06	0.38	0.13		0.12	0.00	0.01	0.01	0.07
5	0.04	0.07	0.03	0.12		0.01	0.09	0.00	0.01
6	0.00	0.00	0.01	0.00	0.01		0.01	0.00	0.00
7	0.00	0.02	0.00	0.01	0.09	0.01		0.00	0.00
8	0.01	0.01	0.03	0.01	0.00	0.00	0.00		0.10
9	0.07	0.11	0.06	0.07	0.01	0.00	0.00	0.10	

Note: Source is Morningstar. A portfolio's Ownership Zone is derived by plotting each stock in the fund's portfolio. A shaded area represents the center 75% of the fund's assets. A "centroid" plot in the middle of the Ownership Zone is the weighted average of all the fund's holdings. The top chart plots the centroid point over time to measure consistency.

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## U.S. Equity Style Box- VALIC

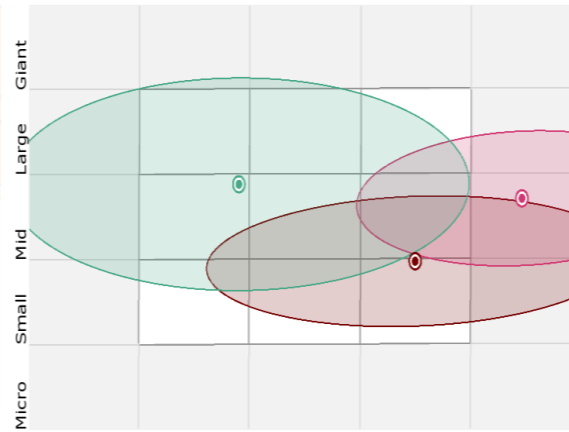
Holdings-Based Style



● MFS Value A ● American Funds Invmt Co of America A ● Calvert Equity A  
● Pioneer A ● Harbor Capital Appreciation Adm

Large Cap Funds

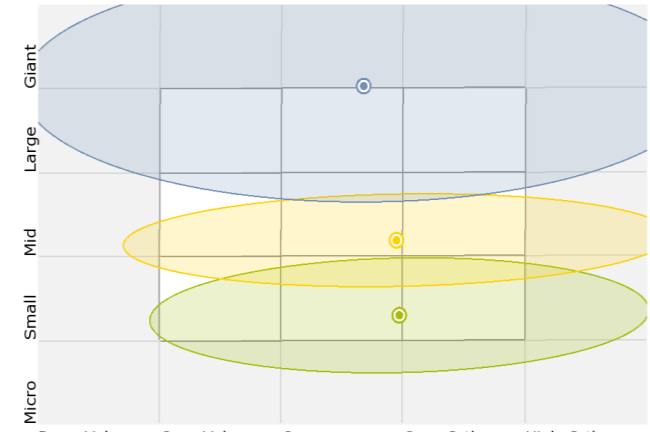
Holdings-Based Style



● Perkins Mid Cap Value A ● Turner Midcap Growth Investor ● Neuberger Berman Genesis Tr

Mid & Small Cap Funds

Holdings-Based Style



● Dreyfus S&P 500 Index ● Dreyfus MidCap Index ● Dreyfus Small Cap Stock Index

Index Funds

### Common Holdings

	1	2	3	4	5	6	7	8	9	10
1 MFS Value A		0.28	0.08	0.26	0.09	0.13	0.03	0.00	0.03	0.07
2 American Funds Invmt Co of Ameri...	0.28		0.15	0.27	0.12	0.07	0.00	0.00	0.06	0.06
3 Calvert Equity A	0.08	0.15		0.13	0.24	0.05	0.09	0.00	0.01	0.09
4 Pioneer A	0.26	0.27	0.13		0.15	0.17	0.07	0.00	0.02	0.09
5 Harbor Capital Appreciation Adm	0.09	0.12	0.24	0.15		0.03	0.16	0.01	0.04	0.10
6 Perkins Mid Cap Value A	0.13	0.07	0.05	0.17	0.03		0.02	0.01	0.02	0.04
7 Turner Midcap Growth Investor	0.03	0.00	0.09	0.07	0.16	0.02		0.05	0.00	0.02
8 Neuberger Berman Genesis Tr	0.00	0.00	0.00	0.00	0.01	0.01	0.05		0.00	0.00
9 American Funds EuroPacific Gr R3	0.03	0.06	0.01	0.02	0.04	0.02	0.00	0.00		0.12
10 Oppenheimer Global A	0.07	0.06	0.09	0.09	0.10	0.04	0.02	0.00	0.12	

Note: Source is Morningstar. A portfolio's Ownership Zone is derived by plotting each stock in the fund's portfolio. A shaded area represents the center 75% of the fund's assets. A "centroid" plot in the middle of the Ownership Zone is the weighted average of all the fund's holdings. The top chart plots the centroid point over time to measure consistency.

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## Supplemental Information

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# Current Offerings Total Assets by Fund – Mass Mutual

<b>Fund</b>	<b>Assets</b>	<b>% of Plan</b>	<b>Part/ W Contributions</b>	<b># of Participants</b>
Fixed Account	\$ 63,649,446	40.4%	1,245	2,233
Hartford Tot Return Bond HLS	\$ 2,855,725	1.8%	183	305
SSgA Intermediate Bond	\$ 767,577	0.5%	114	158
PIMCO Real Return A	\$ 1,294,331	0.8%	106	132
Janus Balanced	\$ 3,315,552	2.1%	439	653
Oakmark Equity Income I	\$ 6,929,669	4.4%	893	1,402
Hartford Dividend and Growth HLS	\$ 7,187,027	4.6%	786	1,224
Hartford Capital Appreciation HLS	\$ 23,284,625	14.8%	1,617	2,550
Neuberger Berman Soc Responsible Tr	\$ 795,331	0.5%	182	245
SSgA S&P 500 Index	\$ 4,735,616	3.0%	422	722
SSgA US Total Market Index	\$ 268,415	0.2%	74	87
Amer Fds Growth Fd of America R3	\$ 10,372,008	6.6%	888	1,480
Artisan Mid Cap Value	\$ 935,623	0.6%	267	376
SSgA S&P 400 Mid Cap Index	\$ 1,320,538	0.8%	417	545
Hartford MidCap HLS	\$ 9,751,923	6.2%	1,184	1,740
Nuveen NWQ Small Cap Value A	\$ 175,292	0.1%	50	62
SSgA Russell 2000 Index	\$ 1,170,644	0.7%	300	396
Royce Value Plus Service	\$ 510,673	0.3%	150	196
MFS Int'l New Discovery A	\$ 2,427,001	1.5%	720	983
SSgA EAFE Index	\$ 3,265,668	2.1%	828	1,152
Mutual Global Discovery A	\$ 9,157,592	5.8%	1,189	1,768
SDBA	\$ 3,256,296	2.1%	28	44
<b>Total Plan</b>	<b>\$ 157,426,571</b>	<b>100.0%</b>	<b>12082</b>	<b>18453</b>

**Total Participants**

**2,150**

**3,704**

Fund Expense Summary - Mass Mutual						
Current Plan Assets and Funds	Assets	Asset Allocation	Expense Ratio <sup>1</sup>	Investment Cost on Assets	Revenue Sharing <sup>2</sup>	Revenue Share in \$\$
Fixed Account	\$ 63,649,446	40.4%	0.25%	\$ 159,124	0.00%	\$ -
Hartford Tot Return Bond HLS	\$ 2,855,725	1.8%	0.49%	\$ 13,993	0.25%	\$ 7,139
SSgA Intermediate Bond	\$ 767,577	0.5%	0.20%	\$ 1,535	0.14%	\$ 1,075
PIMCO Real Return A	\$ 1,294,331	0.8%	0.85%	\$ 11,002	0.40%	\$ 5,177
Janus Balanced	\$ 3,315,552	2.1%	0.84%	\$ 27,851	0.30%	\$ 9,947
Oakmark Equity Income I	\$ 6,929,669	4.4%	0.77%	\$ 53,358	0.25%	\$ 17,324
Hartford Dividend and Growth HLS	\$ 7,187,027	4.6%	0.67%	\$ 48,153	0.25%	\$ 17,968
Hartford Capital Appreciation HLS	\$ 23,284,625	14.8%	0.67%	\$ 156,007	0.25%	\$ 58,212
Neuberger Berman Soc Responsible Inv	\$ 795,331	0.5%	0.90%	\$ 7,158	0.25%	\$ 1,988
SSgA S&P 500 Index	\$ 4,735,616	3.0%	0.20%	\$ 9,471	0.18%	\$ 8,524
SSgA US Total Market Index	\$ 268,415	0.2%	0.23%	\$ 617	0.15%	\$ 403
Amer Fds Growth Fd of America R3	\$ 10,372,008	6.6%	0.98%	\$ 101,646	0.60%	\$ 62,232
Artisan Mid-Cap Value	\$ 935,623	0.6%	1.20%	\$ 11,227	0.35%	\$ 3,275
SSgA S&P 400 Mid Cap Index	\$ 1,320,538	0.8%	0.20%	\$ 2,641	0.15%	\$ 1,981
Hartford MidCap HLS	\$ 9,751,923	6.2%	0.71%	\$ 69,239	0.25%	\$ 24,380
Nuveen NWQ Small Cap Value A	\$ 175,292	0.1%	1.43%	\$ 2,507	0.55%	\$ 964
SSgA Russell 2000 Index	\$ 1,170,644	0.7%	0.20%	\$ 2,341	0.14%	\$ 1,639
Royce Value Plus Service	\$ 510,673	0.3%	1.45%	\$ 7,405	0.35%	\$ 1,787
MFS Int'l New Discovery A	\$ 2,427,001	1.5%	1.39%	\$ 33,735	0.65%	\$ 15,776
SSgA EAFE Index	\$ 3,265,668	2.1%	0.30%	\$ 9,797	0.15%	\$ 4,899
Mutual Global Discovery A	\$ 9,157,592	5.8%	1.31%	\$ 119,964	0.60%	\$ 54,946
SDBA	\$ 3,256,296	2.1%	0.00%	\$ -	0.00%	\$ -
<b>Total</b>	<b>\$ 157,426,571</b>	<b>100.0%</b>				<b>\$ 299,634</b>
<b>Total Expense (% of assets)</b>			<b>0.55%</b>	<b>\$ 848,772</b>	<b>0.19%</b>	
<b>Total Expense (% of assets w/o Fixed Account)</b>			<b>0.76%</b>			
<b>Summary: Plan Revenue</b>						
Number of Active Participants	2,150					
Number of Total Participants	3,704					
<b>Revenue Sharing</b>						<b>\$ 299,634</b>
<b>Frozen Assets Rev Share <sup>3</sup></b>	<b>\$ 4,860,124</b>	<b>0.42%</b>				<b>\$ 20,232</b>
<b>Total Revenue</b>						<b>\$ 319,865</b>
Buck Consultant Fee (Monthly)	\$13,471					\$161,652
<b>Total Net Revenue</b>						<b>\$ 158,213</b>
Per Participant Charge		\$ 86.36				

1. Fund expenses were provided by Morningstar and Hartford

2. Based on data received from the FSO. The total revenue sharing expense is a weighted average.

3. This figure includes revenue that the FSO may receive on funds that have been removed from the current line up. This is based on revenue sharing figures received from Hartford.

# Current Offerings Total Assets by Fund - ING Financial

<b>Fund</b>	<b>Assets</b>	<b>% of Plan</b>	<b>Part w/ Contributions</b>	<b># of Participants</b>
Fixed Account	\$ 45,980,996	60.8%	458	1,138
PIMCO Total Return Admin	\$ 624,387	0.8%	66	93
Vanguard Total Bond Mkt Idx - Signal	\$ 1,777,654	2.3%	85	134
Amer Century Inflation-Adj Bond - Inv	\$ 893,475	1.2%	61	95
Templeton Global Bond - Advisor	\$ 613,787	0.8%	39	70
ING Van Kampen Equity & Inc	\$ 1,639,937	2.2%	106	184
T. Rowe Price Value - Adv	\$ 2,042,715	2.7%	218	350
Fidelity Contrafund	\$ 1,575,773	2.1%	219	301
ING Stock Index	\$ 2,504,660	3.3%	96	250
Neuberger Berman Socially Resp- Investor	\$ 430,154	0.6%	64	82
Vanguard Total Stock Index - Signal	\$ 3,054,018	4.0%	172	270
ING T.Rowe Price Growth Equity I	\$ 3,645,810	4.8%	182	381
Vanguard Mid-Cap Index Fund - Signal	\$ 1,009,000	1.3%	156	223
TRP Mid Cap Growth Adv	\$ 950,945	1.3%	178	227
Allianz NFJ Small Cap Val Fund - Inst	\$ 1,064,227	1.4%	134	192
ING Russell Sm Cap Index I	\$ 274,199	0.4%	88	108
ING Baron Small Cap Growth	\$ 2,302,700	3.0%	127	273
Dodge & Cox International Stock	\$ 368,586	0.5%	129	152
ING International Index Portfolio - I	\$ 126,891	0.2%	8	10
ING Oppenheimer Global Portfolio I	\$ 4,770,210	6.3%	252	509
<b>Total Plan</b>	<b>\$ 75,650,122</b>	<b>100%</b>	<b>2838</b>	<b>5042</b>

**Total Participants**

**705**

**1646**

Fund Expense Summary - ING							
Current Plan Assets and Funds	Assets	Asset Allocation	Expense Ratio <sup>1</sup>	Admin Expense Charge	Total Plan Expense <sup>2</sup>	Revenue Sharing <sup>3</sup>	Revenue Share in \$\$
Fixed Account	\$45,980,996	60.8%	0.26%	0.00%	0.26%	0.00%	\$ -
PIMCO Total Return Admin	\$624,387	0.8%	0.71%	0.25%	0.96%	0.25%	\$ 1,561
Vanguard Total Bond Mkt Idx- Signal	\$1,777,654	2.3%	0.10%	0.00%	0.10%	0.00%	\$ -
Amer Century Inflation-Adj Bond - Inv	\$893,475	1.2%	0.48%	0.00%	0.48%	0.25%	\$ 2,234
Templeton Global Bond - Advisor	\$613,787	0.8%	0.64%	0.25%	0.89%	0.15%	\$ 921
ING Van Kampen Equity Inc I	\$1,639,937	2.2%	0.66%	0.25%	0.91%	0.35%	\$ 5,740
T Rowe Price Value - Adv	\$2,042,715	2.7%	1.03%	0.25%	1.28%	0.35%	\$ 7,150
Fidelity Contrafund	\$1,575,773	2.1%	0.81%	0.25%	1.06%	0.25%	\$ 3,939
ING Stock Index	\$2,504,660	3.3%	0.26%	0.00%	0.26%	0.25%	\$ 6,262
Neuberger Berman Socially Resp- Investor	\$430,154	0.6%	0.90%	0.25%	1.15%	0.10%	\$ 430
Vanguard Total Stock Index-Signal	\$3,054,018	4.0%	0.06%	0.00%	0.06%	0.00%	\$ -
ING T.Rowe Price Growth Equity I	\$3,645,810	4.8%	0.73%	0.25%	0.98%	0.35%	\$ 12,760
Vanguard Mid-Cap Index Fund - Signal	\$1,009,000	1.3%	0.10%	0.00%	0.10%	0.00%	\$ -
TRP Mid Cap Growth Adv	\$950,945	1.3%	1.05%	0.25%	1.30%	0.35%	\$ 3,328
Allianz NFJ Small Cap Val Fund - Inst	\$1,064,227	1.4%	0.78%	0.25%	1.03%	0.10%	\$ 1,064
ING Russell Sm Cap Index I	\$274,199	0.4%	0.46%	0.00%	0.46%	0.10%	\$ 274
ING Baron Small Cap Growth	\$2,302,700	3.0%	1.00%	0.25%	1.25%	0.35%	\$ 8,059
Dodge & Cox International Stock	\$368,586	0.5%	0.64%	0.25%	0.89%	0.10%	\$ 369
ING International Index Portfolio - I	\$126,891	0.2%	0.51%	0.00%	0.51%	0.10%	\$ 127
ING Oppenheimer Global Portfolio I	\$4,770,210	6.3%	0.75%	0.25%	1.00%	0.35%	\$ 16,696
<b>Total \$\$</b>	<b>\$75,650,122</b>	<b>100.0%</b>	<b>\$ 299,802</b>	<b>\$ 50,073</b>	<b>\$ 349,875</b>		<b>\$ 70,914</b>
<b>Total Expense (% of assets)</b>			<b>0.40%</b>	<b>0.17%</b>	<b>0.46%</b>	<b>0.09%</b>	
<b>Total Expense (% of assets w/o Fixed Account)</b>			<b>0.61%</b>		<b>0.78%</b>		
<b>Summary: Plan Revenue</b>							
Number of Active Participants	705						
Number of Total Participants	1,646						
<b>Program Admin Charge</b>							<b>\$ 122,750</b>
<b>Revenue Sharing</b>							<b>\$ 70,914</b>
<b>Frozen Assets Rev Share <sup>4</sup></b>	<b>\$29,070,699</b>	<b>0.26%</b>		<b>\$ 72,677</b>			<b>\$ 74,232</b>
<b>Total Revenue</b>							<b>\$ 267,895</b>
Buck Consultant Fee (Monthly)	\$4,671						\$56,052
<b>Total Net Revenue</b>							<b>\$ 211,843</b>
Per Participant Charge		\$ 162.76					

- 1.Fund expenses were provided by ING.
- 2.The total plan costs reflect the basis point charge which includes the total fund operating expense plus the admin expense.
- 3.Based on data received from the FSO. The total revenue sharing expense is a weighted average.
- 4.This figure includes revenue or program admin charge that the FSO may receive on funds that have been removed from the current line up. This is based on revenue sharing figures received from ING.

# Current Offerings Total Assets by Fund - VALIC

<b>Fund</b>	<b>Assets</b>	<b>% of Plan</b>	<b>Part w/ Contributions</b>	<b># of Participants</b>
Fixed Account	\$ 20,237,889	35.4%		
Amer Cent Cap Preservation	\$ 112	0.0%	1	3
Dreyfus Bond Index	\$ 1,036,863	1.8%	73	151
PIMCO Total Return A	\$ 1,649,871	2.9%	110	220
PIMCO Real Return A	\$ 473,485	0.8%	33	59
Templeton Global Bond A	\$ 556,338	1.0%	46	71
American Balanced	\$ 4,017,797	7.0%	247	489
Investment Co. of America	\$ 1,662,729	2.9%	114	233
MFS Value A	\$ 2,375,081	4.2%	188	305
Calvert Social Inv. Equity	\$ 732,644	1.3%	28	56
Dreyfus S&P 500 Index	\$ 4,116,475	7.2%	239	512
Pioneer A	\$ 1,225,793	2.1%	77	161
Harbor Capital Appreciation Adm	\$ 1,349,399	2.4%	329	614
Janus Perkins Mid Cap Value A	\$ 212,274	0.4%	51	68
Dreyfus Mid Cap Index	\$ 942,567	1.6%	122	167
Turner Mid Cap Growth	\$ 2,219,968	3.9%	268	465
Dreyfus Small Cap Stk Index	\$ 289,237	0.5%	57	81
Neuberger Berman Genesis Tr	\$ 6,381,172	11.2%	463	819
American Funds Euro Pacific	\$ 3,908,660	6.8%	356	621
Dreyfus International Index	\$ 465,019	0.8%	47	62
Oppenheimer Global A	\$ 3,006,638	5.3%	242	452
SDBA	\$ 302,599	0.5%	1	10
<b>Total Plan</b>	<b>\$ 57,162,611</b>	<b>100%</b>	<b>3092</b>	<b>5619</b>

**Total Participants**

**702**

**1,585**

Fund Expense Summary - VALIC						
Current Plan Assets and Funds	Assets	Asset Allocation	Expense Ratio <sup>1</sup>	Investment Cost on Assets	Revenue Sharing <sup>2</sup>	Revenue Share in \$\$
Fixed Account	\$20,237,889	35.4%	0.50%	\$ 101,189	0.00%	\$ -
American Century Capital Preservation	\$112	0.0%	0.48%	\$ 1	0.25%	\$ 0
Dreyfus Bond Index	\$1,036,863	1.8%	0.40%	\$ 4,147	0.35%	\$ 3,629
Pimco Total Return A	\$1,649,871	2.9%	0.85%	\$ 14,024	0.35%	\$ 5,775
Pimco Real Return A	\$473,485	0.8%	0.85%	\$ 4,025	0.35%	\$ 1,657
Templeton Global Bond A	\$556,338	1.0%	0.89%	\$ 4,951	0.40%	\$ 2,225
Amer Funds American Balanced A	\$4,017,797	7.0%	0.62%	\$ 24,910	0.30%	\$ 12,053
Amer Funds Investment Co. of America A	\$1,662,729	2.9%	0.61%	\$ 10,143	0.30%	\$ 4,988
MFS Value A	\$2,375,081	4.2%	0.94%	\$ 22,326	0.40%	\$ 9,500
Calvert Social Inv. Equity A	\$732,644	1.3%	1.22%	\$ 8,938	0.50%	\$ 3,663
Dreyfus S&P 500 Index	\$4,116,475	7.2%	0.50%	\$ 20,582	0.40%	\$ 16,466
Pioneer A	\$1,225,793	2.1%	1.09%	\$ 13,361	0.55%	\$ 6,742
Harbor Capital Appreciation Adm	\$1,349,399	2.4%	1.02%	\$ 13,764	0.35%	\$ 4,723
Perkins Mid Cap Value A	\$212,274	0.4%	1.17%	\$ 2,484	0.35%	\$ 743
Dreyfus Mid Cap Index	\$942,567	1.6%	0.50%	\$ 4,713	0.40%	\$ 3,770
Turner Mid Cap Growth	\$2,219,968	3.9%	1.18%	\$ 26,196	0.35%	\$ 7,770
Dreyfus Small Cap Stk Index	\$289,237	0.5%	0.50%	\$ 1,446	0.40%	\$ 1,157
Neuberger Berman Genesis Tr	\$6,381,172	11.2%	1.14%	\$ 72,745	0.25%	\$ 15,953
American Funds Euro Pacific R3	\$3,908,660	6.8%	1.14%	\$ 44,559	0.60%	\$ 23,452
Dreyfus International Index	\$465,019	0.8%	0.60%	\$ 2,790	0.40%	\$ 1,860
Oppenheimer Global A	\$3,006,638	5.3%	1.16%	\$ 34,877	0.50%	\$ 15,033
SDBA	\$302,599	0.5%	0.00%	\$ -	0.00%	\$ -
<b>Total</b>	<b>\$57,162,611</b>	<b>100.0%</b>				<b>\$ 141,160</b>
<b>Total Expense (% of assets)</b>			<b>0.76%</b>	<b>\$ 432,171</b>	<b>0.25%</b>	
<b>Total Expense (% of assets w/o Fixed Account)</b>			<b>0.90%</b>			
<b>Summary: Plan Revenue</b>						
Number of Active Participants	702					
Number of Total Participants	1,585					
<b>Revenue Sharing</b>						<b>\$ 141,160</b>
<b>Frozen Assets Rev Share <sup>3</sup></b>	<b>\$ 15,776,448</b>	<b>0.29%</b>				<b>\$ 45,483</b>
<b>Total Revenue</b>						<b>\$186,644</b>
Buck Consultant Fee (Monthly)	\$4,650					\$55,800
<b>Total Net Revenue</b>						<b>\$130,844</b>
Per Participant Charge	\$117.76					

1.Fund expenses were provided by Morningstar.

2.Based on data received from the FSO. The total revenue sharing expense is a weighted average.

3.This figure includes revenue that the FSO may receive on funds that have been removed from the current line up. This is based on revenue sharing figures received from VALIC. This revenue number does not included the \$8.1 million in an old Fixed Account Plus.

## Appendix – Mass Mutual

HARTFORD LIFE INSURANCE COMPANY	Primary Benchmark	Primary Peer Universe
Hartford Tot Return Bond HLS	BC Aggregate	Intermediate Bond
SSgA Intermediate Bond Index	BC Intrm G/C Index	Intermediate Bond
PIMCO Real Return A	BC US TIPS	Inflation Protected Bond
Janus Balanced	60% S&P/40% BC Agg.	Balanced
Oakmark Equity Inc I	60% S&P/40% BC Agg.	Balanced
Hartford Div & Growth HLS	Russell 1000 Value	Large Value
Hartford Capital App HLS	S&P 500	Large Blend
Neuberger Berman Soc Respon Tr	S&P 500	Large Blend
SSgA S&P 500 Index	S&P 500	Large Blend
SSgA US Total Market Index	Wilshire 5000	Large Blend
Amer Funds Growth of Amer R3	Russell 1000 Growth	Large Growth
Artisan Mid Cap Value Inv	Russell Mid Cap Value	Mid Value
SSgA S&P 400 Mid Cap Index	S&P 400	Mid Blend
Hartford Mid Cap HLS	Russell Mid Cap Gr	Mid Growth
Nuveen NWQ Sm Cap Value A	Russell 2000 Value	Small Value
SSgA Russell 2000 Index	Russell 2000	Small Blend
Royce Value Plus Svc	Russell 2000 Growth	Small Growth
MFS Int'l New Discovery A	MSCI EAFE (net)	Foreign Stock
SSgA MSCI-EAFE	MSCI EAFE (net)	Foreign Stock
Franklin Mutual Global Discovery A	MSCI World	World Stock

**Appendix – ING**

ING FINANCIAL ADVISORS, LLC	Primary Benchmark	Primary Peer Universe
PIMCO Total Return Admin	BC Aggregate	Intermediate Bond
Vanguard Tot Bond Mkt Idx Signal	BC Aggregate	Intermediate Bond
Amer Century Infl-Adj Bond Inv	BC US TIPS Index	Inflation-Protected Bond
Templeton Global Bond Advisor	Citigroup World Govt Non \$US	Global Bond
T. Rowe Price Value Adv	Russell 1000 Value	Large Value
Fidelity Contrafund	S&P 500	Large Blend
Neuberger Ber Socially Resp Inv	S&P 500	Large Blend
ING Stock Index	S&P 500	Large Blend
Vanguard Tot Stk Mkt Idx Signal	MSCI US Broad Mkt Idx	Large Blend
ING TRP Growth Equity I	Russell 1000 Growth	Large Growth
Vanguard Mid Cap Index Signal	MSCI US Mid Cap 450	Mid Blend
TRP Mid Cap Growth Adv	Russell Mid Cap Gr.	Mid Growth
Allianz Small Cap Value Instl	Russell 2000 Value	Small Value
ING Opp Main St Small Cap I	Russell 2000	Small Blend
ING Baron Small Cap Gr I	Russell 2000 Growth	Small Growth
ING International Value I	MSCI EAFE (net)	Foreign Stock
ING International Index Port I	MSCI EAFE (net)	Foreign Stock
Oppenheimer Global Sec I	MSCI World	World Stock



# Appendix – VALIC

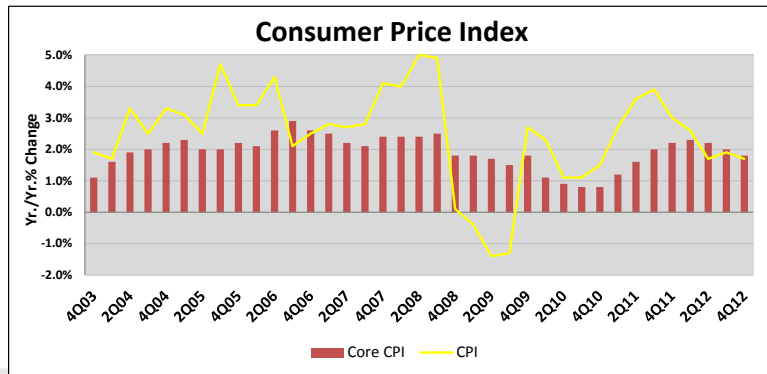
VALIC	Primary Benchmark	Primary Peer Universe
Dreyfus Bond Mkt Index	BC Aggregate Index	Intermediate Bond
PIMCO Total Return A	BC Aggregate Index	Intermediate Bond
PIMCO Real Return A	BC US TIPS Index	Inflation-Protected Bond
Templeton Global Bond A	Citigroup World Govt Non \$US	Global Bond
Amer Funds Amer Bal A	60% S&P/40% BC Agg.	Balanced
Amer Funds Inv Co. of Amer A	Russell 1000 Value	Large Value
MFS Value A	Russell 1000 Value	Large Value
Calvert Social Inv. Equity	S&P 500	Large Blend
Dreyfus S&P 500 Index	S&P 500	Large Blend
Pioneer A	S&P 500	Large Blend
Harbor Capital Appreciation A	Russell 1000 Growth	Large Growth
Perkins Mid Cap Value A	Russell Mid Cap Value	Mid Value
Dreyfus Mid Cap Index	S&P 400	Mid Blend
Turner Mid Cap Growth Inv	Russell Mid Cap Gr.	Mid Growth
Dreyfus Small Cap Stk Index	Russell 2000	Small Blend
Neuberger Berman Genesis Trust	Russell 2000	Small Blend
Amer Funds Euro Pacific R3	MSCI EAFE (net)	Foreign Stock
Dreyfus International Stk Index	MSCI EAFE (net)	Foreign Stock
Oppenheimer Global A	MSCI World	World Stock

## Capital Market Environment

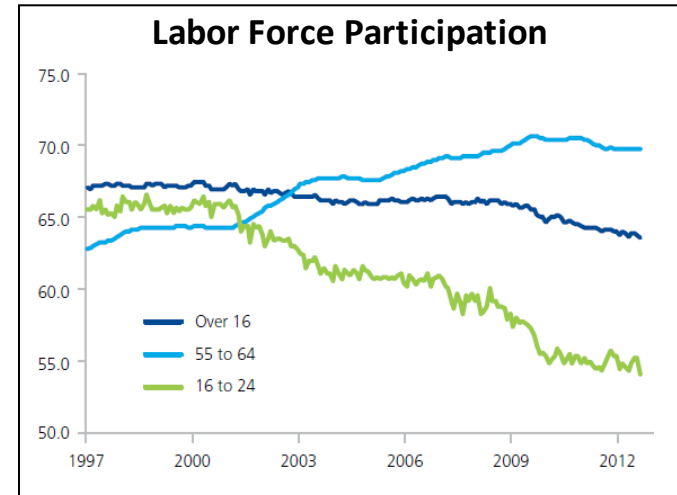
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# Capital Market Commentary - Economy

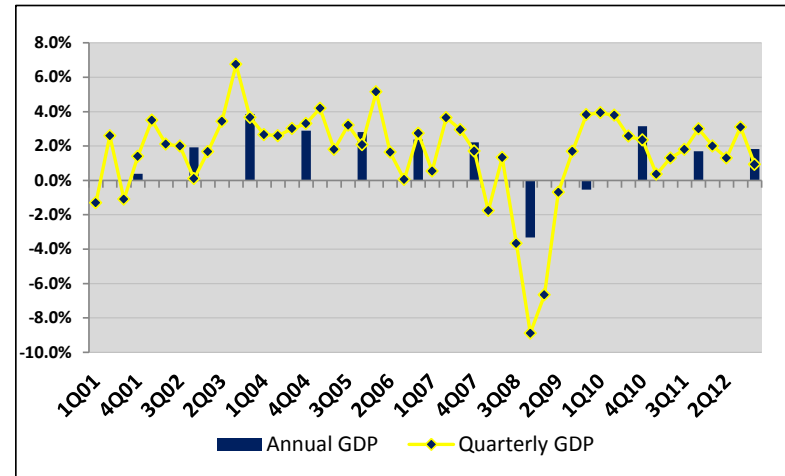
- The FOMC increased transparency into its decision-making process, announcing that a change in the Fed Funds rate would require an unemployment under 6.5% or inflation over 2.5%. Also, they would continue with QE4 by buying \$85 billion a month in Treasuries and MBS.
- The advance estimate of Q4 GDP growth came in at -0.1% versus a consensus forecast of +1.0%. The financial markets looked past the negative headline number and focused on underlying data that indicated strength in personal consumption and fixed investment.
- Employment gains averaged 153,000 per month in 2012, a level deemed by economists roughly sufficient to offset population growth, but not yet representative of a labor market recovery. The unemployment rate ended the year at 7.8%.
- Labor force participation rates continued to decline and averaged 63.7% in 2012, a drop of 2.3% from pre-recession levels. A study by the Kansas City Fed attributes roughly half of the decline to demographic shifts, and the other half to the cyclical downturn.
- Inflation remained subdued, with CPI rising 1.7% over past 12 months. Core CPI (excluding food and energy) gained 1.8%.
- A resolution to the fiscal cliff was reached just after year end, but a resolution to the debt ceiling and automatic spending cuts were not part of the agreement. Markets may remain volatile through the first half of 2013 until Congress addresses these two issues.



Source : Bureau of Labor Statistics. Unadjusted 12 month periods.

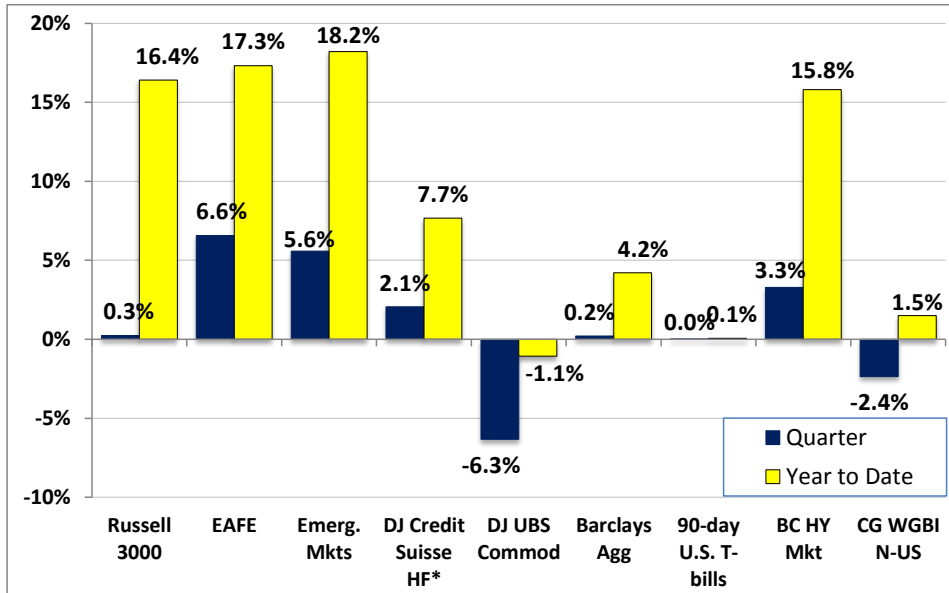


Source : US Department of Labor



Source : Bloomberg

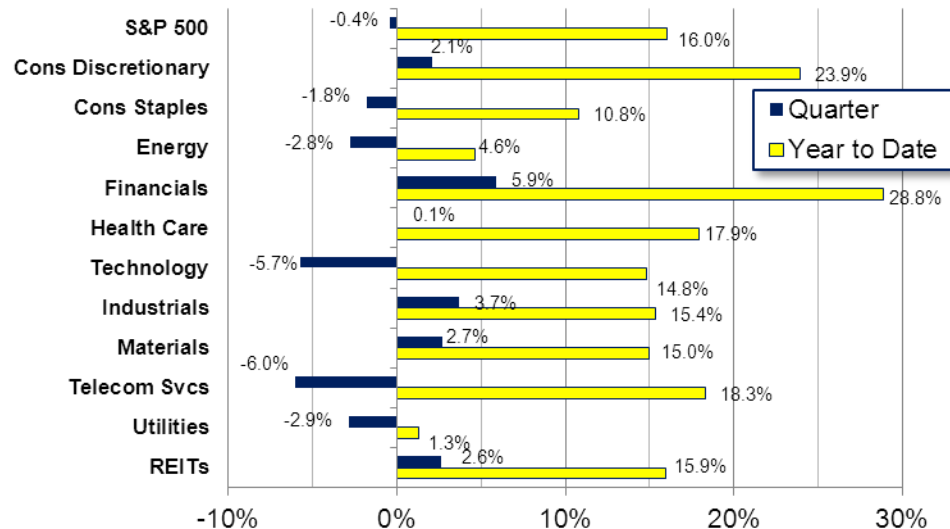
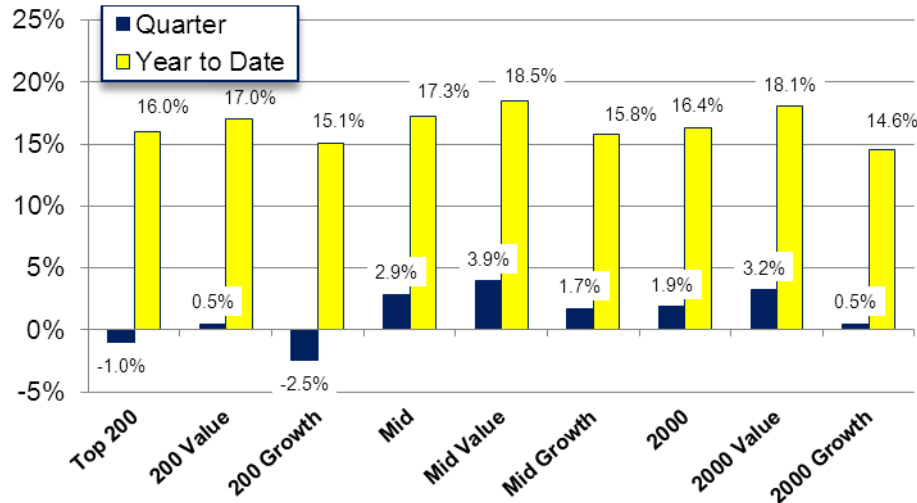
# Capital Market Performance



\*The Credit Suisse/Tremont Hedge Fund Index is an asset-weighted index of hedge funds and shown **net** of all performance fees and expenses. It is the exclusive property of Credit Suisse Tremont Index LLC.

- Equity markets began the year on a strong note, but European fiscal issues and signs of slowing global growth presented a mid-year stumbling block. Later in the year, however, a combination of stimulative global central bank monetary policy and indications of a stabilizing US economy provided support. Year-end concerns over an impending fiscal cliff hindered Q4 returns, but the showing for the year remained solid. The Russell 3000 Index returned 0.3% for the quarter and 16.1% for the year-to-date period.
- International equities (as measured by the MSCI EAFE) outperformed US equities for the second consecutive quarter, and also for the year. Supporting factors included the ECB commitment to preserve the Euro and stabilizing interest-rate environments for indebted Euro-member countries. The MSCI EAFE index returned 6.6% for the quarter, and 17.3% for the year. Emerging markets also outperformed domestic equities with returns of 5.6% for the quarter and 18.2% for the year.
- The Barclays Aggregate Bond Index returned just 0.2% in the quarter and managed a 4.2% return for the year. Credit sectors produced the highest returns.
- High-yield was the best performing domestic fixed-income sector, benefiting from the search for yield in a low interest-rate environment. The sector outperformed equities for the quarter and performed comparably to equities for the year.
- Commodities declined -6.3% during the quarter, compared to a +9.7% gain the previous quarter. Energy (both oil and natural gas) came under pressure on Hurricane Sandy related concerns, while gold declined in the apparent anticipation of a fiscal cliff resolution. Year-to-date, the DJ UBS Commodity Index declined -1.1%.
- The Citigroup World Government Bond Non-USD index declined during the quarter (in USD terms) primarily due to weakening of the Japanese yen.

# Domestic Equity Market Performance



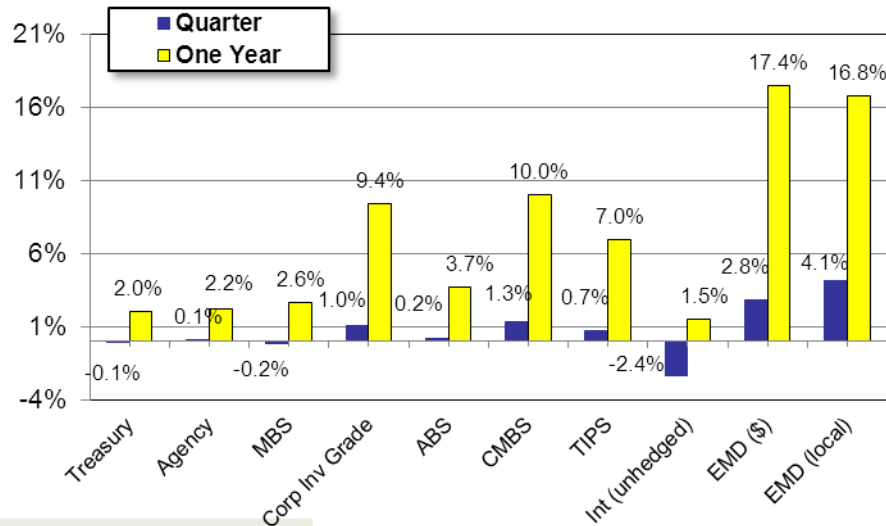
- Equity market performance for the year was solid, with relatively little dispersion between the various market capitalizations and styles. Performances ranged from 15.1% for large-growth to 18.5% for mid-cap value. Mega-cap growth exhibited noticeable weakness in Q4, and this was the result of a -20% decline in Apple, which accounted for almost 12% of the index at the beginning of the quarter.
- Sector returns exhibited much more variation during the year, ranging from 1.3% for utilities to 28.8% for financials. Financials found support from a stabilizing economy, including apparent movement toward a recovery in US housing prices. Larger banks found support as uncertainty related to Europe exposure diminished as focal point of concern.
- During the final quarter, performance among sectors was again mixed, with financials and industrials leading, and technology and telecom trailing. Apple was again influential with respect to the technology sector, and detracted about 480 basis points from the sector's return. Weakness in telecom was driven by AT&T, which declined -10% and accounted for about half of the sector.

Phase	Description	Top Performers
Early Cycle Phase	Investors anticipate recovery near end of recession	Financials, Consumer Discretionary, Info. Tech, Industrials
Mid-Cycle Phase	Prior to Fed's initial rate increase as economy expands	Info. Tech, Industrials, Energy, Materials
Late-Cycle Phase	Prior to recession, market anticipates a slowdown	Energy, Materials, Consumer Staples, Health Care
Recession Phase	Economic contraction	Consumer Staples, Health Care, Utilities, Telecom.

Note: The top performers are general expectations.  
It is not guaranteed that these sectors will perform as presented

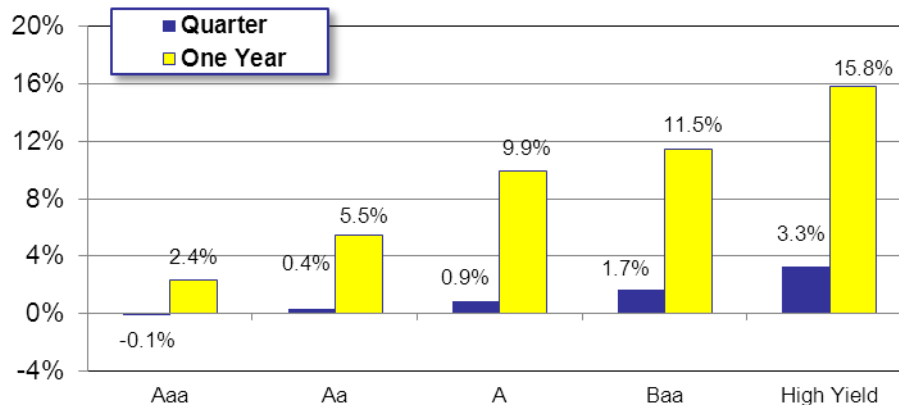
# Bond Market Performance – By Sector and Quality

## Returns By Sector



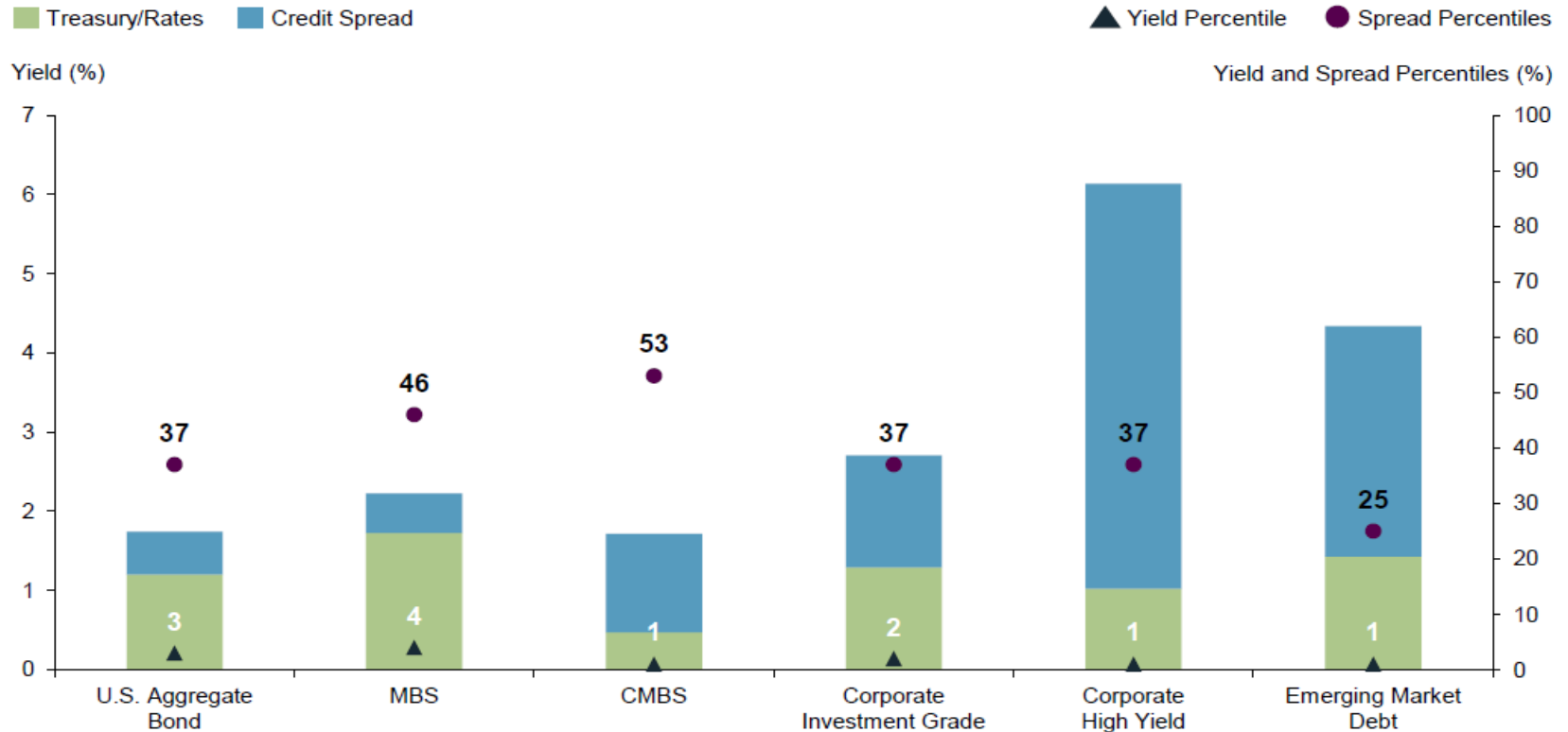
- The Barclays Capital US Aggregate Index returned 0.2% for the fourth quarter, bringing the one-year return to 4.2%.
- Among the domestic sectors, credit outperformed for both the quarter and year, especially lower-rated BBB and high yield issues. Given tighter credit spreads and the already low level of interest rates in general, it may be difficult for these sectors of the bond markets to replicate the returns of 2012 in 2013.
- Treasuries narrowly outperformed inflation for the year, returning 2.0%. Agency MBS received some support from continued Federal Reserve purchases, but CMBS outperformed among securitized issues, benefiting from the overall “risk-on” sentiment.
- International developed sovereign bonds suffered in US dollar terms on the significant appreciation of the US dollar versus the Japanese yen (approximate 11% gain in Q4) prompted by the election of a new prime minister intent on stripping the Bank of Japan of its independence from political influence. Given that Japan accounts for more than 40% of developed-market non-US debt, its influence was dominant.
- Sovereign emerging markets debt (EMD) issued in U.S. dollars and local currencies generally outperformed the U.S. bond market during both the fourth quarter and calendar year 2012. We note that risk profile for USD denominated debt (as measured by standard deviation) was slightly more elevated compared to high yield, while local-denominated debt exhibited a risk profile comparable to equities, but with reduced correlation.

## Returns By Quality



# Fixed Income Sector Valuations

## Fixed-Income Yields & Spreads

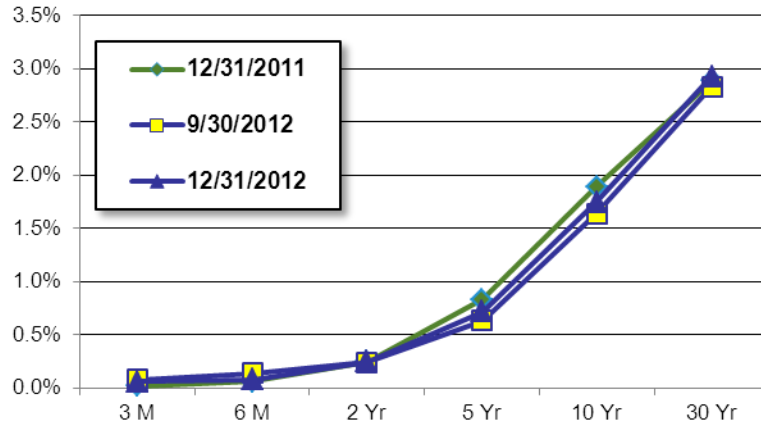


Source: Fidelity (based on Barclays indices from 2000-2012)

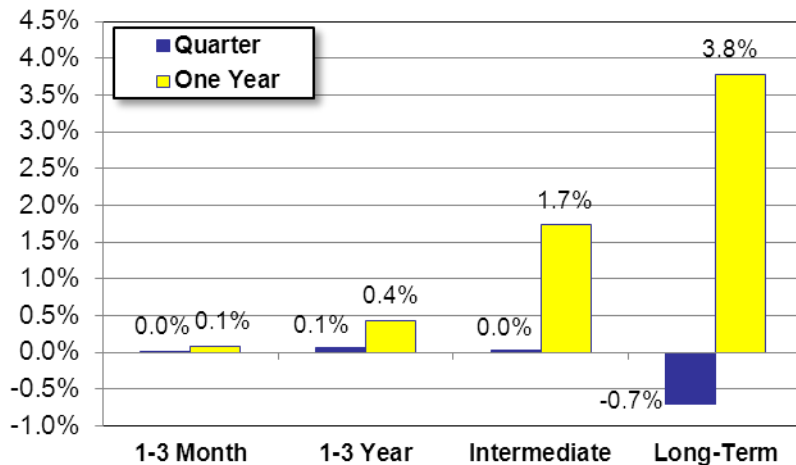
- Circles represent historical spread percentiles, while triangles represent historical yield percentiles.
- With the exception of CMBS, all sectors are trading at below-median spreads to Treasuries (relative to their history). Absolute yields are at extremely low levels across all sectors, ranging from the bottom 1<sup>st</sup> to 4<sup>th</sup> percentiles.

# Bond Market Performance – By Maturity

## Yield Curve – US Government Debt



## Returns on US Government Debt – By Maturity



- Interest rates were little changed over the course of the year, with the yield on the 10-Year Treasury beginning at 1.87% and ending at 1.76%. The annual change, however, masks an intra-year 100 basis points range, when it rose in March to 2.37% on short-lived observations of an improving economy, and proceeded to drop to 1.38% during the summer when concerns over Europe peaked.
- The FOMC announced that the Fed Funds rate would remain in the range of 0.00% to 0.25% and that it would be conditional on unemployment remaining greater than 6.5% and inflation under 2.5%. This has been termed the “Evans Rule”, named from a September 2011 speech by Chicago Fed president Charles Evans who called for the FOMC to utilize specific economic thresholds to determine when a tightening of monetary policy would be appropriate. They also stated that they expect inflation to remain at or below 2% over the “medium term.”
- After announcing a decision to buy \$40 billion in agency MBS per month during the third quarter, the FOMC announced in the fourth quarter that those purchases would continue, and that there would be additional purchases of \$45 billion in Treasuries per month (QE4).



# International Equity Market Performance – By Country And Region (in US Dollars)

## Country & Regional Returns

Quarter	USD	Local	Year-to-Date	USD	Local
Greece	28.1%	25.0%	Belgium	40.7%	38.6%
Austria	19.1%	16.2%	Germany	32.1%	30.1%
Finland	13.2%	10.4%	Denmark	31.9%	30.4%
France	10.9%	8.3%	Singapore	31.0%	23.5%
Portugal	10.5%	7.8%	New Zealand	30.4%	23.3%
Spain	9.9%	7.2%	Hong Kong	28.3%	28.0%
Netherlands	9.5%	6.8%	Austria	27.0%	25.1%
Italy	9.3%	6.7%	Pacific X-Japan	24.7%	22.6%
Germany	8.5%	5.9%	Sweden	23.4%	17.1%
Switzerland	8.0%	5.2%	France	22.8%	20.9%
Europe	7.1%	5.2%	Australia	22.3%	20.8%
Australia	6.9%	7.1%	Switzerland	21.5%	18.9%
EAFE	6.6%	7.6%	Netherlands	21.2%	19.3%
Belgium	6.3%	3.7%	Europe	19.9%	16.4%
Pacific X-Japan	6.1%	6.1%	Norway	19.7%	11.6%
Japan	5.8%	17.6%	EAFE	17.9%	17.9%
Hong Kong	5.7%	5.6%	Finland	16.5%	14.7%
Sweden	5.0%	4.2%	United Kingdom	15.3%	10.2%
New Zealand	4.7%	5.4%	Italy	13.5%	11.7%
United Kingdom	4.2%	3.5%	Canada	9.9%	7.5%
Denmark	3.3%	0.9%	Japan	8.4%	21.8%
Singapore	3.2%	2.8%	Ireland	6.3%	4.7%
Ireland	3.0%	0.5%	Greece	5.7%	4.1%
Norway	1.1%	-1.8%	Portugal	5.0%	3.4%
Canada	0.9%	2.1%	Spain	4.7%	3.1%

- The major developed international economies continued to exhibit declining growth. For the Eurozone, Q3 marked the second consecutive quarterly contraction in GDP (though the two-quarter decline of -0.6% so far pales in comparison to the -5.6% decline experienced in 2008-2009). Japan reported an annualized -3.5% decline in Q3, the biggest drop seen since the earthquake/tsunami of 2011. Nevertheless, developed international markets ended the year on a strong note, as market participants focused on the diminished likelihood of tail risks, e.g. Greek default, Euro collapse, etc., rather than the current economic environment.
- Risks still remain in Europe, as countries such as Spain and Italy face sizable debt maturities in 2013. Spain has apparently recognized its “too big too fail” status, as it awaits more relaxed austerity terms before participating in the Outright Monetary Transactions program (OMT). Under the OMT program, the ECB would intervene to cap rising sovereign bond yields of participating countries in exchange for the implementation of austerity measures.
- Japan equities saw a sizeable disparity between US dollar and local currency returns due to an 11% appreciation in the US dollar versus the Japanese yen. This was the result of the election of a government clear in its desire to directly influence the Bank of Japan’s monetary policy to include a 2% inflation target and a quantitative easing program that would include purchases of foreign currency bonds to help weaken the yen. Equities, especially those of exporters, responded favorably. Such policies do present risks for a dramatic rise in interest rates, though the yield on the Japanese Government Bond has remained under 2% since 1999, aided in part by a lack of foreign ownership.

# Emerging Markets Performance – By Country And Region (in US Dollars)

## Country & Regional Returns

Quarter	USD	Local	Year-to-Date	USD	Local
Turkey	18.4%	17.7%	Turkey	64.9%	55.8%
China	12.9%	12.8%	Philippines	47.6%	38.2%
Poland	11.7%	8.0%	Poland	41.0%	27.0%
Philippines	11.6%	9.8%	Thailand	34.9%	30.8%
South Africa	6.3%	9.3%	Mexico	29.1%	20.1%
EM Eur /Mid East	5.9%	6.2%	India	26.0%	30.0%
Asia	5.9%	5.2%	China	23.1%	22.9%
Thailand	5.9%	5.2%	Hungary	22.8%	11.9%
Mexico	5.7%	6.8%	EM Eur /Mid East	22.5%	21.5%
Total Emerg Mkts	5.6%	5.4%	Korea	21.5%	12.9%
Korea	4.8%	0.9%	Asia	21.2%	18.2%
Latin America	4.4%	5.1%	South Africa	19.0%	25.1%
Malaysia	3.7%	3.8%	Total Emerg Mkts	18.6%	17.4%
Brazil	3.6%	4.5%	Taiwan	17.7%	12.8%
Russia	2.5%	0.7%	Russia	14.4%	9.7%
Taiwan	1.5%	0.6%	Malaysia	14.3%	10.2%
Indonesia	1.1%	1.8%	Latin America	8.9%	12.5%
India	0.5%	4.4%	Chile	8.3%	-0.1%
Chile	-0.6%	0.3%	Indonesia	5.2%	11.8%
Hungary	-1.5%	-1.8%	Brazil	0.3%	10.1%

- Europe was the best performing emerging market region, as countries such as Turkey and Poland benefited from a perception of improved stability among their developed-market counterparts. In a year marked by credit-rating downgrades, Turkey received a credit-rating upgrade.
- Asian markets also performed relatively well, and China ended the year on a strong note. Although decelerating growth was experienced during the first three quarters of the year, the picture grew more positive in Q4. Debt, however, continues to remain a concern. While sovereign debt levels remain moderate, corporate debt has risen to alarming levels, with some estimates placing corporate debt at 122% of GDP.
- Latin American markets underperformed the broader EM indices. Brazil has experienced sluggish growth (weak energy markets played a role) and its economy is expected to grow by 1% in 2012. The government has used currency intervention as a policy tool to weaken the Brazilian real and reduce interest rates but such measures have shown limited effectiveness.

# Market Indices – For Periods Ended December 31, 2012

	3 Months Return	6 Months Return	9 Months Return	1 Year Return	2 Years *Return	3 Years *Return	4 Years *Return	5 Years *Return	10 Years *Return
S&P 500 Index	-0.38	5.95	3.03	16.00	8.84	10.87	14.58	1.66	7.10
NASDAQ	-2.65	3.68	-1.27	17.45	7.93	11.19	18.89	3.68	9.40
MSCI EAFE Index	6.60	14.05	6.23	17.90	2.01	4.04	10.51	-3.21	8.70
MSCI Emerging Markets Index	5.61	13.94	3.94	18.63	-1.48	4.98	19.97	-0.61	16.88
MSCI All Country World ex USA	5.89	13.83	5.43	17.39	0.87	4.33	12.71	-2.44	10.22
Russell 1000 Index	0.12	6.44	3.12	16.42	8.71	11.12	15.21	1.92	7.52
Russell Midcap Index	2.88	8.62	3.84	17.28	7.45	13.15	19.44	3.57	10.65
Russell 2000 Index	1.85	7.20	3.48	16.35	5.59	12.25	15.81	3.56	9.72
Russell 3000 Index	0.25	6.49	3.14	16.42	8.45	11.20	15.26	2.04	7.68
Russell 1000 Growth Index	-1.32	4.71	0.50	15.26	8.77	11.35	17.32	3.12	7.52
Russell 1000 Value Index	1.52	8.13	5.75	17.51	8.61	10.86	13.01	0.59	7.38
Russell Midcap Growth Index	1.69	7.13	1.12	15.81	6.72	12.91	20.46	3.23	10.32
Russell Midcap Value Index	3.93	9.95	6.37	18.51	8.11	13.39	18.27	3.79	10.63
Russell 2000 Growth Index	0.45	5.31	1.16	14.59	5.48	12.82	17.88	3.49	9.80
Russell 2000 Value Index	3.22	9.07	5.79	18.05	5.62	11.57	13.76	3.55	9.50
NAREIT Equity REITs	2.58	2.74	6.56	18.06	13.07	17.83	20.29	5.45	11.63
Barclays Capital Intermediate G/C Bond Index	0.35	1.76	3.26	3.89	4.84	5.19	5.20	5.18	4.62
Barclays Capital Long Term G/C Bond Index	0.45	3.56	11.14	8.78	15.43	13.65	10.59	10.16	7.96
Barclays Capital Mortgage-Backed Securities	-0.20	0.92	2.02	2.59	4.40	4.72	5.01	5.67	5.08
Barclays Capital Aggregate Bond Index	0.21	1.80	3.90	4.21	6.01	6.19	6.12	5.95	5.18
Barclays Capital U.S. TIPS	0.69	2.82	6.07	6.98	10.22	8.90	9.52	7.04	6.65
Barclays Capital U.S. Government	-0.06	0.53	3.18	2.02	5.46	5.48	3.51	5.23	4.66
Barclays Capital U.S. Corporate Inv Grade	1.06	4.93	7.58	9.82	8.98	8.98	11.33	7.87	6.33
Barclays Capital U.S. Corporate High Yield	3.29	7.97	9.95	15.81	10.26	11.86	21.99	10.34	10.62
Citigroup Non-US WGBI USD	-2.36	1.53	1.73	1.51	3.32	3.95	4.06	5.24	6.38
JP Morgan EMBI Global Diversified USD	2.80	9.63	12.65	17.44	12.28	12.27	16.42	10.07	10.98
JP Morgan GBI EM Global Diversified USD	4.13	9.13	7.81	16.76	7.10	9.89	12.80	8.94	12.30
Citigroup 90-Day Treasury Bills	0.02	0.05	0.06	0.07	0.07	0.09	0.11	0.45	1.69

\* Returns greater than one year are annualized.

# Market Indices – Annual Returns

	2003 Return	2004 Return	2005 Return	2006 Return	2007 Return	2008 Return	2009 Return	2010 Return	2011 Return	2012 Return
S&P 500 Index	28.68	10.88	4.91	15.79	5.49	-37.00	26.46	15.06	2.11	16.00
NASDAQ	50.69	9.15	2.12	10.38	10.55	-40.03	45.32	18.02	-0.83	17.45
MSCI EAFE Index	39.17	20.70	14.02	26.86	11.63	-43.06	32.46	8.21	-11.73	17.90
MSCI Emerging Markets Index	56.28	25.95	34.54	32.55	39.82	-53.18	79.02	19.20	-18.17	18.63
MSCI All Country World ex USA	41.41	21.36	17.11	27.16	17.12	-45.24	42.14	11.60	-13.33	17.39
Russell 1000 Index	29.89	11.40	6.27	15.46	5.77	-37.60	28.43	16.10	1.50	16.42
Russell Midcap Index	40.06	20.22	12.65	15.26	5.60	-41.46	40.48	25.48	-1.55	17.28
Russell 2000 Index	47.25	18.33	4.55	18.37	-1.57	-33.79	27.17	26.85	-4.18	16.35
Russell 3000 Index	31.06	11.95	6.12	15.72	5.14	-37.31	28.34	16.93	1.03	16.42
Russell 1000 Growth Index	29.75	6.30	5.26	9.07	11.81	-38.44	37.21	16.71	2.64	15.26
Russell 1000 Value Index	30.03	16.49	7.05	22.25	-0.17	-36.85	19.69	15.51	0.39	17.51
Russell Midcap Growth Index	42.71	15.48	12.10	10.66	11.43	-44.32	46.29	26.38	-1.65	15.81
Russell Midcap Value Index	38.07	23.71	12.65	20.22	-1.42	-38.44	34.21	24.75	-1.38	18.51
Russell 2000 Growth Index	48.54	14.31	4.15	13.35	7.05	-38.54	34.47	29.09	-2.91	14.59
Russell 2000 Value Index	46.03	22.25	4.71	23.48	-9.78	-28.92	20.58	24.50	-5.50	18.05
NAREIT Equity REITs	37.13	31.58	12.16	35.06	-15.69	-37.73	27.99	27.96	8.29	18.06
Barclays Capital Intermediate G/C Bond Index	4.31	3.04	1.58	4.08	7.39	5.08	5.24	5.89	5.80	3.89
Barclays Capital Long Term G/C Bond Index	5.87	8.56	5.33	2.71	6.60	8.44	1.92	10.16	22.49	8.78
Barclays Capital Mortgage-Backed Securities	3.07	4.70	2.61	5.22	6.90	8.34	5.89	5.37	6.23	2.59
Barclays Capital Aggregate Bond Index	4.10	4.34	2.43	4.33	6.97	5.24	5.93	6.54	7.84	4.21
Barclays Capital U.S. TIPS	8.40	8.46	2.84	0.41	11.64	-2.35	11.41	6.31	13.56	6.98
Barclays Capital U.S. Government	2.36	3.48	2.65	3.48	8.66	12.39	-2.20	5.52	9.02	2.02
Barclays Capital U.S. Corporate Inv Grade	8.24	5.39	1.68	4.30	4.56	-4.94	18.68	9.00	8.15	9.82
Barclays Capital U.S. Corporate High Yield	28.97	11.13	2.74	11.85	1.87	-26.16	58.21	15.12	4.98	15.81
Citigroup Non-US WGBI USD	18.52	12.14	-9.20	6.94	11.45	10.11	4.39	5.21	5.17	1.51
JP Morgan EMBI Global Diversified USD	22.21	11.62	10.25	9.86	6.16	-12.03	29.82	12.24	7.35	17.44
JP Morgan GBI EM Global Diversified USD	16.92	22.97	6.27	15.22	18.11	-5.22	21.98	15.68	-1.75	16.76
Citigroup 90-Day Treasury Bills	1.07	1.24	3.00	4.76	4.74	1.80	0.16	0.13	0.08	0.07

## Investment Policy

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## Investment Policy Statement

### **I. Introduction**

The purpose of this document is to define the investment structure, goals and monitoring process for the Internal Revenue Code Section 457 (“457 Plan”) sponsored by the State of Maine. To accomplish this it will establish the overall asset mix of the 457 Plan, and set guidelines and performance measurement standards for the 457 Plan.

The key elements of the investment policy are the risk spectrum of funds offered, the mix of specific funds, the number and type of options, the fund structure of the “variable” and “mutual fund” offerings, performance indices and objectives and security guidelines.

The 457 Plan will offer investment options that comply with this policy effective July 1, 2001. These investment options will be available to new participants on and after July 1, 2001. For participants prior to July 1, 2001, the prior investment options will be available through December 31, 2001. If no election is made for new investment options by December 31, 2001, the account balances will be mapped into similar investment option.

### **II. Asset Class Mix**

The investment funds offered by providers on both the variable annuity and mutual fund products should maintain a range of asset classes providing for an appropriate diversified portfolio for each participant. The number and type of funds will be reviewed annually. The consultant and the State of Maine will determine if additions or deletions to the asset classes should be made.

Each provider is limited to 16 investment options(called the core options) including no more than five variable annuity products and one general account product. In addition, each provider has the ability to offer a self directed account. A vendor may, if approved by the consultant and the State of Maine, offer additional investment options providing they are indexed to an acceptable market benchmark and that the vendor may not impose an administrative expense. The options offered by the providers will be selected from the asset classes listed below.

<b>Low Risk</b>	<b>Risk Oriented</b>
Money market	Growth Equity Index
<b>Moderate Risk</b>	Active Equity Income
Income	Growth & Income
Long Bond	Global Stock Funds
<b>Median Risk</b>	<b>High Risk</b>
Asset Allocation	Small and mid cap
LifeStyle	International
Balanced	

## III. Manager Structure

Investment managers will be selected based upon investment philosophy, performance, risk, people, fees and other criteria. Participants will have the opportunity to contribute across the variable annuity products or the mutual fund products consistent with their own portfolio and risk needs. The 457 Plan will offer a spectrum which is consistent with prudent standards and avoiding duplicative investments. The structure may use passive or active approaches.

Each manager's risk/return will be analyzed annually to measure volatility as measured by the standard deviation of annual returns, and the number of absolute negative periods will be compared to its index and to its universe.

## IV. Return Objective

The return performance standard will be comprised of benchmarks that are the best fit for the appropriate products, and measured to a broad universe of products with similar styles. The principal time horizon for performance measurement and selection will be three to five years using a time weighted rate of return net of fees and expenses.

## V. Fees

Fees for the plan are differentiated for the variable annuity assets and the mutual fund assets. The asset based fees will be netted from performance of the underlying investments when providing comparisons to peer funds and benchmark indexes. The long term objective is to minimize the loss of value to participant's accounts due to the fee burden. Particular attention will be toward constraining asset based fees when the relevant expense does not relate to asset size. Other charges such as those imposed per transaction or per account, will be shown separately.

The expense categories for each structure include but not limited to:

### Variable/Wrapped

- Insurance Features
- Marketing (including 12 b-1)
- Administration
- Principal Protection Cancellation
- Investment Management

### Mutual Fund/Unwrapped

- Investment Management
- Marketing (including 12 b-1)
- Administration

Expense categories may change over time.

## VI. Investment Guidelines

### Low Risk

#### Money Market/Stable Value

#### Managers Guidelines

- Maintain a high quality, investment grade portfolio
- Money market funds should target maturities under 1 year
- Stable Value funds should target average maturities under 5 years

#### Performance Guidelines

- Money market funds will be compared to a comparable maturity Treasury return and ranked in the Donoghue or equivalent universe
- Stable Value funds will be compared to a Treasury note of comparable maturity to the fund and to a stable value fund universe (Heuler or equivalent)

#### Fixed Interest Fund Guidelines

- The average portfolio quality should be single A
- Liquidity is important to maintain because of possible redemptions
- The duration of the portfolio should target the 7 year bond

#### Fixed Interest Performance Objectives

- Outperform the 7 year bond over a market cycle, or 3 years whichever is less
- Rank at the median or better of a broad universe of bond managers

### Moderate Risk/Fixed Income Managers

#### Moderate Risk/Fixed Income Manager Guidelines

- Investment must be U.S. dollar denominated obligations of the United States Government and its agencies and instrumentalities and U.S. corporations
- Mortgage-backed securities including collateralized mortgages (“CMO’s”)
- Asset backed securities (“ABS’s”)
- Municipal bonds



- Yankee bonds
- Eurobonds
- Fixed income securities must be rated at least Baa3/BBB or higher by Moodys or Standard & Poors, respectively at the time of purchase

### Moderate Risk/Fixed Income Manager Performance Objectives

- Exceed the return of the Lehman Aggregate Bond Index or the Lehman Government Corporate Bond Index (dependent on style) over a market cycle, or 3 years whichever is less
- Rank at the median or better of a broad universe of fixed income managers

### **Median Risk/Balanced Managers**

#### **Style Definitions**

- Asset Allocation  
Manager varies the investment proportions by each asset class on a tactical basis
- Lifestyle  
Asset allocation is set strategically to reflect a class of participants specific needs
- Balanced  
The fund has a target asset allocation reflecting a long term growth income focus

### Median Risk/Balanced Manager Guidelines (Asset Allocation, Life Style, Balanced)

- The equity portion of the balanced manager's portfolios may include the common stocks and convertible bonds of U.S. companies, ADR's, and equity securities of foreign companies trading in the U.S. markets and capable of settlement in the U.S.
- The fixed income portion of these portfolios may include U.S. dollar denominated obligations of the United States Government and U.S. corporations
- Mortgage backed securities including collateralized mortgage obligations ("CMO's")
- Asset backed securities ("ABS's")
- Municipal bonds
- Short term securities
- Yankee bonds
- Eurobonds
- Short term instruments

### Median Risk/Balanced Manager Performance Objectives

- Exceed the return of the blended benchmark defined to be 50% of the S&P 500 Index and 50% of the Lehman Aggregate Bond Index over a market cycle, or 3 years whichever is less
- Rank at the median or better of a broad universe of balanced managers

### **Risk Oriented**

#### Risk Oriented Equity Manager Guidelines (Large Cap)

- Equities must be traded on NYSE, AMEX or the NASDAQ
- Short sales are prohibited
- No more than 5% at market value of a corporation's outstanding issues in a given security class may be purchased
- No more than 5% at market value of the U.S. equity portfolio may be in one issue
- Managers are selected based on their style of management such as value, growth and core and are expected to maintain that style

#### Risk Oriented Equity Performance Objectives (Large Cap)

#### U.S. Large Cap Equity Managers

- Exceed the return of the S&P 500 index over a market cycle, or 3 years whichever is less
- Rank at the median or better of a broad universe of large cap managers

### **High Risk (Small, Mid Cap and International)**

#### High Risk Equity Manager Guidelines (Small & Mid Cap)

- Equities must be traded on NYSE, AMEX or the NASDAQ
- Short sales are prohibited
- No more than 5% at market value of a corporation's outstanding issues in a given security class may be purchased
- No more than 5% at market value of the U.S. equity portfolio may be in one issue
- Managers are selected based on their style of management such as value, growth and core and are expected to maintain that style

#### U.S. Mid Cap Equity Managers Performance Objectives

- Exceed the return of the S&P 400 Midcap index over a market cycle, or 3 years whichever is less
- Rank at the median or better of a broad universe of mid cap managers

### U.S. Small Cap Equity Managers Performance Objectives

- Exceed the return of the Russell 2000 Index over a market cycle, or 3 years whichever is less
- Rank at the median or better of a broad universe of small cap managers

### **High Risk/Non-U.S. Equity Managers (International)**

#### High Risk/Non U.S. Equity Manager Guidelines (International)

- Invests in non-U.S. dollar denominated securities and ADR's
- Invests in short term instruments
- Managers may hedge their currency risk, but not for speculation
- Up to 25% of the portfolio may be represented by investment in issues located in countries that are not included in the MSCI EAFE Index

#### High Risk/Non U.S. Equity Manager Performance Objectives (International)

- Exceed the return of the MSCI EAFE Index over a market cycle, or 3 years whichever is less
- Rank at the median or better of a broad universe of international managers

## **VII. Control Procedures**

On a timely basis, but not less than annually, the Committee will meet to review whether each manager continues to conform to the criteria outlined in the previous section; specifically:

- The manager's adherence to the Fund's investment guidelines;
- Material changes in the manager's organization, investment philosophy and/or personnel; and,
- Any legal, SEC and/or other regulatory agency proceedings affecting the firm.

A watch list will be created for managers that fail to meet performance, organizational or regulatory requirements.

The consultants and vendors will review any specific fund named in a regulatory action as having participated in illegal after hours trading or allowed market timing or other practices which disadvantaged the Plan participants. Any such fund will immediately be considered for replacement and the Trustees will be presented with alternative investment options for the mapping of Plan participant assets.

## VIII. Roles and Responsibilities

### Administrator

- Collect data from vendors to provide reporting to Plan Sponsor
- Coordinate communication
- Recommend Investment Policy
- Recommend specific funds and asset mix to Plan Sponsor
- Provide full performance report to Plan Sponsor semiannually with summary reports quarterly

### Plan Sponsor

- Approve investment policy statement
- Review performance of underlying investment offerings semiannually
- Approve specific variable annuity funds and mutual funds for inclusion as investment

### Trustee

- Hold mutual fund shares on behalf of participants

## Definitions of Investment Styles and Objectives

- **Large Cap Core Equity Index:** Large Cap Core Equity Index Style managers hold portfolios with characteristics similar to those of the broader market as represented by the Standard & Poor's 500 Index.
- **Large Cap Core Equity:** The fund's holdings and characteristics are similar to that of the broader market as represented by the Standard & Poor's 500 Index with the objective of adding value over and above the index, typically from sector or issue selection.
- **Large Cap Value Equity:** A fund that invests in predominately large capitalization companies believed to be undervalued or possessing lower than average price to book and price to earnings ratios. The companies are expected to have a near-term earnings rebound and realize their potential for capital appreciation.
- **Large Cap Growth Equity:** A fund that invests in predominately large capitalization companies that are expected to have above average prospects for long-term growth in earnings and profitability. Future growth prospects take precedence over valuation levels in the stock selection process.
- **Mid Cap Growth Equity:** A fund that invests primarily in mid capitalization companies that are expected to have above-average prospects for long-term growth in earnings and profitability. Future growth prospects take precedence over valuation levels in selecting stocks.
- **Mid Cap Value Equity:** A fund that invests primarily in mid capitalization companies believed to be currently undervalued in the general market. Valuation issues take precedence over near term earnings prospects in the stock selection process. Market capitalizations are generally between core (large) equity companies and small capitalization companies.
- **Small Cap Broad Equity:** A fund that invests primarily in companies with relatively small capitalization. The companies typically have zero dividends or dividend yields below the broader market. The securities exhibit greater volatility than the broader market as measured by the risk statistics beta and standard deviation. Managers will generally invest in both value and growth stocks.
- **International Core Equity:** A fund that invests in a well-diversified portfolio of mostly large issues in developed countries with liquid markets, resulting in characteristics similar to that of an index such as the Morgan Stanley Capital International (MSCI-EAFE) Europe Australasia Far East Index or MSCI (ACWI) All Country World Index -ex US .
- **Balanced:** This style consists of funds whose primary objective is to split its investment assets among stocks, bonds, and other investment vehicles in an attempt to provide consistent return for the investor while diversifying an investor's assets among different types of investment products.

## Definitions of Investment Styles and Objectives

- **Inflation-Protected Bond:** Inflation-Protected Bond Managers seek to protect investment principal and interest against erosion from inflation over the long term. Typically Managers will invest in inflation-protected debt securities issued by the U.S. Treasury, U.S. government agencies and by other entities such as corporations and foreign governments.
- **Core Bond:** Core Bond managers construct portfolios to approximate the investment results of the Barclays Government/Credit Bond Index or the Barclays Aggregate Bond Index with a modest amount of variability in duration around the index. The objective is to achieve value added from sector and/or issue selection.
- **Socially Responsible Equity:** Socially Responsible Equity managers invest primarily in equity securities of socially responsible companies (as defined) of various market capitalizations domiciled in the United States. Selection of this strategy indicates a willingness to assume a risk level that at times may be greater than that of the US stock market in general
- **Active Investment Management:** The management of an investment portfolio that involves active trading of securities in an attempt to produce above-average returns on a risk-adjusted basis
- **Passive Investment Management:** The management of an investment portfolio that involves attempting to replicate the returns of a single or mixture of broad based market indice(s) in a cost effective manner.